EXHIBIT A

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UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK
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IOWA PUBLIC EMPLOYEES'
RETIREMENT SYSTEM, et al.,

Plaintiffs,

v. 17 Civ. 6221 (SLC)

BANK OF AMERICA CORPORATION,
et al.,

Defendants. Oral Argument
------------------------------x
April 28, 2022
10:09 a.m.

Before:

HON. SARAH L. CAVE,
U.S. Magistrate Judge

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(Case called)

THE DEPUTY CLERK: Counsel beginning with plaintiffs, please state your appearance for the record.

MR. BROCKETT: Good morning, your Honor.

Dan Brocket from Quinn Emanuel for the plaintiffs.

THE COURT: Good morning.

MR. OLSON: Steig Olson from Quinn Emanuel for the plaintiffs.

THE COURT: Okay.

MS. LEVENS: Emmy Levens from Cohen Milstein also for the plaintiffs.

MR. EISENKRAFT: Michael Eisenkraft, Cohen Milstein, the plaintiffs.

THE COURT: Good morning. I know we have a lot of defendants. I guess if I could take the people who are sitting at the table for defendants, and then if there's anybody from the other defendants who wants to note their appearance, you can do that.

MR. WICK: Good morning, your Honor.

Robert Wick, Covington & Burling, I represent JP Morgan.

MR. PLAYFORTH: John Playforth, Covington & Burling, also representing JP Morgan.

MR. MASTORIS: George Mastoris, Winston & Strawn on behalf of the Goldman Sachs.

MS. YABLON: Good morning, your Honor.

Staci Yablon, also Winston & Strawn, Goldman Sachs.

MR. PASKIN: Good morning, your Honor.

Michael Paskin, Cravath, Swaine & Moore for Morgan Stanley.

MS. ROSENBERG: Good morning, your Honor.

Lauren Rosenberg, Cravath, Swaine & Moore, also on behalf of Morgan Stanley.

THE COURT: Good morning.

Anyone else who wants to note their appearance for the record?

MR. WILSON: Peter Wilson from Katten Muchin Rosenman on behalf of UBS.

THE COURT: All right. Good.

So as far as masks go, I will keep mine off because I'm far enough away from all of you. If you could keep yours on while you're seated, but anyone who's either at the podium or standing, you can take your mask off or down. It will just make it a lot easy for us to hear everybody and have a clear record for our wonderful court reporter we have this morning.

So we set aside two and a half hours for each side today. My thought is we'll get started and we'll go for about an hour or so and then take a break. I'll hear from the

plaintiffs obviously first. And then I think after we've gone for about an hour and take a break, we can assess, does it make sense to let the defendants respond for a bit and then go back to the plaintiffs? We'll sort of play it by ear and see how things are going.

I have all the binders that you gave me as well as all the filings. So who will be taking the lead for the plaintiffs.

MR. BROCKETT: Your Honor, this is Dan Brockett. Because of the number of issues on the motion, we'd like to divide the argument among three speakers. My partner Steig Olson will first address questions of liability and impact particularly as they relate to the predominance prong. You see we have something up now up here.

I will then address the damages model, the allege conflict issue and other elements of Rule 23. And then finally Emmy Levens of Cohen Milstein will address disputes surrounding the issue of platform costs and the FTAIA.

And the only other thing I'd like to say by way of preliminary order is that we'd like to reserve 35 to 40 minutes of our time for rebuttal.

THE COURT: Great Of course. All right.

On the defendants side, I will sort of take your run of show when we get to your part of the argument.

Mr.Olson, if you want to get started, get yourself

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situated at the podium. And like I said, you can take your mask off there.

MR. OLSON: Thank you, your Honor. Good morning again. Perhaps two quick preliminaries before we dive in. The Court had requested a better more legible copy of one exhibit. We have that. We can hand that up now.

THE COURT: Yes. Have someone approach. This is much better. Thank you.

MR. OLSON: That's number one. Number two is, as you see we have a presentation. By agreement with defendants, now we are prepared to hand them hard copies of our presentation as well as the Court with the Court's permission. Our colleagues will approach the bench. Thank you.

Are you ready, your Honor?

THE COURT: Yes.

MR. OLSON: As Mr. Brockett said, I will begin with predominance focusing on liability and impact, and then I will hand the presentation back to Mr. Brockett to pick up damages.

Your Honor, the nature of this case is such that common issues predominant, and that is because defendants conspiracy affected the very structure of the stock loan market.

At trial, we will prove that defendants conspired to block and boycott new offerings, including multilateral trading platforms, that would have made the U.S. stock loan market more

competitive, more transparent and more efficient for stock loan borrowers and lenders, that is, our class members.

Defendants took those benefits away from these class members and left all of them trapped in an opaque and inefficient market without the types of trading options that investors enjoy in many financial markets. Because defendants' conspiracy affected all class members in the same fundamental way, the issues in this case are all common to all class members.

And because common issues predominate, we are capable of proving all aspects of our case on a classwide basis, including liability, impact and damages.

THE COURT: Can I just pause you for one second, Mr. Olson. You're only seeking certification under 23(b)(3), right?

MR. OLSON: Correct, your Honor.

THE COURT: But you are seeking injunctive relief, so what's happening with 23(b)(2)?

MR. OLSON: Your Honor, we are seeking both aspects of relief as part of a 23(b)(3)class.

THE COURT: Okay.

MR. OLSON: Let's start with liability. This is the biggest issue in the case. The question that will dominate at trial. We will seek to prove that defendants conspired. They will try to show they didn't, and all of the contested issues

of liability will be common to the class. Now I'll just give a brief overview of our common liability evidence.

First, we have common evidence about motive, why defendants conspired. The common evidence will show that defendants conspired to protect their highly profitable role as intermediaries in the middle of the U.S. stock loan market. Now in the stock loan market as the Court knows, stocks are transferred temporarily from a lender, here on the right, to a borrower.

Lenders, often called beneficial owners, are often pitching funds that have large stock holdings. They often lend through agents called agent lenders. On the other side are the borrowers, who are often hedge funds or proprietary trading funds. The prime brokers sit in the middle. They make borrowers and lenders come to them and have bilateral negotiations. That is why the market is called over-the-counter or OTC.

Now, your Honor, this structure has two important economic characteristics that systematically lead to worse prices for class members.

First, the market is opaque. There is nowhere for borrowers and lenders to go, like an exchange, where they can see all of the latest prices in the market. There is nowhere they can go to see recent transaction prices paid by others, nowhere they can see the range of quotes dealers might provide.

They have no way to know which dealers are providing the best quotes at any point in time.

In so many modern markets in so many aspects of our life, it is easy to find the competitive prices that exist in the market at any moment, not in this one.

Second, the market has high search costs. Now search costs, which we'll talk a lot about today, are not a line item. They're not a specific cost that borrowers and lenders pay, but they are economic costs that borrowers and lenders have to bear.

Borrowers and lenders in this OTC market have to actively search for price quotes through a series of bilateral negotiations with the prime brokers. Often even today in our modern world, this searching occurs by having to pick up the phone and get someone to talk to you on the other end.

In so many markets today, comparison shopping is easy and costless. Think of shopping for airline fares. We use to have to call a travel agent, wait for someone to answer, see what they quoted, hang up the phone, pick up, call another one. That's how we comparison shopped.

Today we can hop on Kayak with a few clicks of a button and see all the competitive prices available to us. Here, borrowers and lenders cannot do that. They have to expend lots of time and effort just to shop.

So these two features of the OTC market, price opacity

and high search costs are well-known, and it is also well-known that they harm borrowers and lenders.

Here is the SEC in November 2021, proposing a rule to increase transparency and efficiency in this market, the U.S. stoke loan market, by requiring that all trades be reported to a central repository.

Here is the first sentence of the SEC's proposed rule making, "The securities lending market is opaque." As the SEC also said, "The lack of public information and data gaps creates inefficiencies in the securities lending market. The gaps in securities lending data render it difficult for borrowers and lenders alike to ascertain market conditions and to know whether the terms they receive are consistent with market conditions."

Now, the OTC market structure also harms class members by imposing high search costs. Financial economist have shown that markets or investors must work to find price quotes. Dealers can charge supercompetitive prices.

The seminal work here was done by Peter Diamond and it won the Nobel Prize in 2010. This is from the Nobel Prize award. As the committee said, "Diamond found that even a minuet search cost moves the equillibrium price very far from the competitive price." He showed that the only equillibrium outcome is the monopoly price. I'll explain that in a moment.

This fundamental insight about how search costs hurt

investors has generated a lot of follow-up research, and our experts have been at the forefront of much of that work.

Basically it shows that when dealers know that investors face high search costs, they can charge supercompetitive prices. They can use that knowledge to charge higher prices.

Now here's an example to illustrate the point, and this an example that our expert Dr. Zhu gave. Let's say that the competitive price for a security is 150 basis points to buy or sell it. Let's say that the economic search cost for each inquiry the investor has to make to get a price quote is 10 basis points per inquiry. Remember, that's an economic cost, not a line item.

A dealer in that circumstance will never quote 150 basis points, the competitive price, because they will know that for the investor to even seek another price quote, they will have to pay 10 more basis points. So the dealer would begin by thinking about quoting a 159 basis points above the competitive level, because that's the price, that's the highest price that will not incentivize the investor to go look for another price quote. It's right below that 10.

But it's actually much worst than this, and this is the Diamond insight, because when all dealers know this is the circumstance in the market, they all know that their baseline price is actually 159, not the 150. And then each dealer knows

that actually they can charge nine more basis points so the investor will not go and make the other inquiry. They'll charge 168.

But now that everyone knows it's 168, they will actually charge the nine more, and it goes on and on until it reaches the monopoly price, so this is the insight that even a relatively small search cost can lead to monopoly pricing.

THE COURT: So in your example, if we could just go back. So the monopoly is the 159?

MR. OLSON: It's going to be higher than that. The monopoly price is the highest possible price that someone could charge without losing money. It will depend on the exact market what that is, but it is going to be above the 159. It could be the 177. It could be the 186. The point is, with search costs, dealers zoom all the way up to the Monopoly price.

THE COURT: And in the but-for world, it would be 150?

MR. OLSON: Correct, your Honor. The competitive price is the 150, correct. Now, this work has been refined. There are nuances to it, but this is the fundamental insight and I'm going to return in the context and apply it to this case in a few moments.

So these flaws make the U.S. stock loan market inefficient and antiquated. This comes from an analysis from a 2012 analysis by a leading U.S. clearinghouse, that I will not

name today, but they were studying this market internally. And as they concluded internally, "The securities lending environment has long been inefficient and antiquated. Operating without an exchange or other electronic trading platforms. Contracts have been bilaterally negotiated and market participants have not been able to appropriately gage supply and demand since reliable and transparent pricing has been lacking. The opacity in the marketplace has diminished consumer confidence and has stalled the securities lending market potential."

Basically that point is, this also suppresses output. There's less lending and borrowing than there would be in the competitive market. So the problems were well-known. The solutions are also well-known.

In many other financial markets, exchanges and electronic trading platforms entered to improve the market. Exchange is a multilateral trading platforms, make markets transparent solving the opacity problem, and they dramatically reduce the costs of searching, solving the search cost problem, and they entered and tried to do that here too. But as this same analysis from that same clearinghouse in 2012 observed, these current market events have spawn a development of new exchanges in electronic trading platforms, such as LendEX.

THE COURT: Let me stop you for one second.

(Pause)

THE COURT: Go ahead.

MR. OLSON: AQS, another one that entered, and that's also called Quadriserv, a prominent one discussed in case. SecFinex, which was backed by the New York Stock Exchange and its founders then later founded SL-x, and ISEC. These entered to provide efficient trading and price transparency to the stock loan market, but the defendants blocked all of them. None exist today.

How did they do this? The common evidence shows that defendants saw these threats as far back as 2001, and they joined together to fight them.

Now, 2001 was the year that Quadriserv or AQS was founded to develop a central marketplace for stock loan transactions, and that's the same year that defendants formed EquiLend, to combat, in their own words, the threat of disintermediation. That's a term that they used to refer to these new entrants, such as AQS and Quadriserv, that would threaten their highly profitable privilege roles intermediaries. These are their own words, come from their own files.

Exhibit 4 the one on top was a slide deck prepared for an EquiLend board of directors meeting. It answers the question, "Why was EquiLend formed?" Quite candidly, "Threat of disintermediation forced firms to come together to create EquiLend." The next snippet is from a JP Morgan doc, document

from 2008, "EquiLend was born as a cartel."

So following the 2008 financial crisis, regulators began pushing for central clearing in financial markets. This increased that disintermediation risk for defendants, because central clearing often leads straight to multilateral trading.

So in early 2009 under EquiLend, defendants formed what they called a CCP working group, central clearing working group within EquiLend. Now the name is misleading. Defendants didn't use this group to work to bring central clearing to the market. They used the group to get on the same page about how to oppose bringing central clearing to the market.

They all agreed they would oppose central clearing, and they agreed that none of them would become involved with any trading platform linked to a central clearing solution.

In June 2009, the prime broker defendants through their board representatives adopted the CCP working groups' agreement to boycott platforms connected to CCPs, that's what's reflected here. We have three call outs from a longer document.

The first one notes that after all of the them agreed they wouldn't support central clearing, they all agreed they would keep using EquiLend to share information about what's going on in the marketplace about central clearing.

Secondly, they said, and we'll make sure we reconvene this working group when we need to if there are any

developments we need to address to oppose central clearing.

And the last call out is the most significant. It says, To the extent any firm changes it's direction on this initiative -- any firm, that's any bank -- i.e., becomes involved with an MTFCCP, they will notify EquiLend. An MTF is a multilateral trade facility or platform, and a CCP is a central clearing solution.

THE COURT: So just stepping back from what the defendants alleged conduct is, I just want to make sure I understand the difference between the platform and the central clearing house?

MR. OLSON: Yes.

THE COURT: Those are owned and operated independently by two different firms or entities?

MR. OLSON: Typically, yes, your Honor.

So, for example, with AQS, which is one of the central platforms that we allege was boycotted, AQS was working with a central clearing party called the OCC, which is a prominent clearing house.

A clearing house solves the solution of needing to know who your counter-party is. You don't need to know who your counter-party is because the central clearing house becomes the counter-party, and the central clearing house takes on all the risk, so you don't have to worry about risk anymore. So that's why in a financial crisis, regulators pushed it so

much.

THE COURT: So you necessarily need both, you need the platform and you need the clearing house?

MR. OLSON: To have a platform, you typically need a clearing house, yes. But the flip side of that is, once you have central clearing, platforms typically follow very quickly, and so that's why defendants saw this as such a threat.

THE COURT: Can a platform have more than one clearing house?

MR. OLSON: A platform could potentially have work with two clearing houses and have two different solutions. Often it's one, but it could be more.

THE COURT: Okay.

MR. OLSON: So Jean Gemelli was one of Credit Suisse's board representatives at EquiLend for 10 years.

Let's hear what he has to say about what was discussed at EquiLend's meetings.

(Media played)

(Media stopped)

MR. OLSON: These new entrance were the platforms. This is a remarkable admission. Competitors are supposed to make independent decisions about what new entrance to support or sign up within and which ones they were not going to. They're not supposed to coordinate their business plans, but that is what defendants did here as the common evidence shows.

Now, they also conspire to make sure no one else would support these platforms either. Here's an example.

In February 2010, as this document shows, AQS made a big announcement. A major agent lender Bank of New York Mellon was going to join and support its platform. Goldman Sachs heard about this and quickly was alarmed.

William Conley, the head of Goldman Sachs's stock lending desk called Kathy Rulong at Bank of New York Mellon on the phone, and as he bragged to his team he, "Beat Kathy up on this."

What that means is, is Mr. Conley demanded that Ms. Rulong get on a plane and fly from Pittsburgh to New York City, come to his office, so she could sit in his office and hear more threats from Goldman Sachs about the financial punishment her bank would receive if they continued to support AQS, and so Bank of New York Mellon stopped supporting AQS.

Bill Conley did the same thing to State Street, a similar thing happened in Northern Trust, but regulators kept pushing for central clearing, and defendants recognized it was coming in some form. So in 2015 -- remember as they had said they would -- they reconvene that CCP working group. And there they agreed to a set of core principles about how to block the threat.

The first one says it all, "Bilateral trading model must be maintained." That is, they pledged that even as central

clearing was adopted in this market, none of them would support multilateral trading.

Now fortunately we have some of the notes from that discussion so we have so more detail. Those notes show that Morgan Stanley brought this up by saying, What we really need to do is preserve the, "bilateral pricing model." That is the high prices they could charge in the OTC market where people have to come to them bilaterally and don't have multilateral options, and all defendants agreed to that.

Let's hear again from Mr. Gemelli, Credit Suisse's board rep.

(Media played)

(Media stopped)

MR. OLSON: And it worked, the market is still bilateral today. All these new entrants failed. So in short, your Honor, we have very strong evidence of defendant's conspiracy in this case, and all of it is common to the class.

Now we're also capable of proving that this conspiracy had classwide impact using common proof. Here we lean on our experts, who are among the most respected financial economist in the world.

Our leading impact expert here on the left is Dr. Haoxiang Zhu whose academic career focused on studying these exact issues about the impact of OTC market structure and investors that are relevant in this case. He has published

seminal leading work in the field, and Dr. Zhu is not a litigation expert for hire. He has never been one in any other case. He's just an expert on these issues. Indeed in December 2021, he was appointed by the SEC to serve as the director of its division of trading and markets, that's the division that regulates these very financial markets at issue. His expertise here clearly cannot be questioned.

And the same is true of our other experts who focus more on damages, Professor Parag Pathak, won the Bates Clark medal in 2018. His colleague Paul Asquith at MIT has published foundational research on the very issues that are relevant to this case.

Now I'll just note a couple of differences with defendants' experts. First, their financial economist who focuses mostly on impact here on the left is Professor Terrence Hendershott. We're going to hear a few clips from his testimony today.

As the Court will see rather than building on his academic work, as our experts have done, Professor Hendershott in this case is forced to downplay his own academic work to support defendants' positions in this case.

Defendants other economic expert is Professor McCrary. His background is different. He was briefly an assistant economics professor. Today he's a law professor.

Unlike the other experts in this case, he has never

published any papers on the market structure issues relevant here, including about OTC markets or the impact of search costs, but he is a prolific defense expert. We'll note that in just the past four years alone, he identified 45 litigation engagements, nearly every one for corporate defendants.

So to begin with our proof of common impact. In over 90 pages of his opening report, Dr. Zhu analyzes rigorously the economic structure of the U.S. stock loan market and the record evidence. That analysis leads him to the following baseline economic conclusions about impact:

First, economic theory demonstrates that the OTC structure of the market imposes market-wide harms on class members for some of the reasons I've already mentioned.

Second, he concludes that a anonymous multilateral trading with central clearing was economically viable in this market by January 1, 2012.

Third, he concludes the introduction of multilateral trading platforms would have benefited all or virtually all class members. And fourth, he discusses how the additional price transparency would also have benefited all class members.

Now, I mentioned that Professors Pathak and Asquith focus mainly on damages. They do offer one additional reason why economic theory supports a finding of classwide impact in their report, the beginning part of their report before they get to damages.

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Specifically, they model the spread revenues the prime brokers enjoy from their intermediary position, and they show that they are above competitive levels. These large spreads are reflected in the orange rectangle on the left-hand graph.

As they explain, these spreads are above competitive levels, and the significance of this graph is, price is inflated and quantity is suppressed below which would prevail in a competitive market which they model on the right side. So that's the beginning.

Now, next, having established a baseline economic theory of classwide impact, Dr. Zhu test that theory using a variety of economic and quantitative test suited to the question.

Specifically, he applies an economic search model of how dealer prices respond to platform entry. Second, he conducts a yardstick analysis of other comparable financial markets.

And third he conducts a quantitative analysis of the limited AQS trading data that existed before it was put out of business by the defendants. In each of these tests he concludes confirm his baseline economic conclusion of classwide impact. And this is a tried and true methodology what Dr. Zhu used here, as the recent *Olean* decision which we submitted to the Court indicates.

As the Court is aware, *Olean* is a recent En Banc

decision from the Ninth Circuit. It's in a way I think fortunate it came before this decision because it's a comprehensive analysis of the law that governs the Court's decision.

I'll note it was authored by Judge Ikuta. That's significant because she was the jurist who wrote the dissent in the Wal-Mart v. Dukes case before the Ninth Circuit, and it was her reasoning in that dissent that was then later adopted by the Supreme Court in overturning class certification in that case, so she is one of the most esteemed jurist of class certification issues in the country. And I'll say frankly, your Honor, we agree with all of her analysis about the law and it comports with the Second Circuit.

Now *Olean*, a price fixing case, involving tuna suppliers, there the plaintiffs' expert Dr. Mangum uses similar methodology to our experts. He first examined the economic structure of the market and its finding supported a baseline economic conclusion, that the collusion would affect class members on a classwide basis, and he then used a number of different econometric tools to evaluate whether they supported his theory, and the Ninth Circuit affirmed that approach.

THE COURT: I know this is the most recent case that you say follows Dr. Zhu's methodology. Is there any Second Circuit case, even older, either district court or Second Circuit that follows something the same or similar to what

Dr. Zhu did?

MR. OLSON: Yes. Your Honor, this basic approach of analyzing the structure of the market and then using econometric tests has been used in a number of cases.

Actually, I think -- well.

THE COURT: If you're going to get to it, fine. If you could answer that at some point, that would be helpful.

MR. OLSON: What I would mention to your Honor is the *Air Cargo* decision by Magistrate Pohorelsky from the E.D.N.Y., which I will discuss in a moment. It's very similar. The *Restasis* case is another one that comes to mind, but this is a tried and true approach that's often used in these cases.

THE COURT: Thank you.

MR. OLSON: Now his tests. Dr. Zhu first test his economic theory of classwide impact by applying an economic search model to this market.

Now it's worthy of note that Dr. Zhu didn't just come up with this model for this case. He developed this model in his academic work with his co-authors outside of this legislation. That model was then peer reviewed and was published in a leading financial journal where it in fact was chosen as the first price winner the year it was published.

The model was developed to test a similar proposition as what it's used to test here. Under what circumstances do financial benchmarks help traders in OTC markets? And

Dr. Zhu's model -- his model answers that question under a variety of scenarios which he elaborates on in the paper. In short, his model found that using a benchmark to increase transparency in the OTC markets can yield widespread benefits for traders.

The passage here on the left is where he introduces the search model which then he goes on to develop over the course of many, many pages. On the right of the concluding remarks -- which I'll quote briefly.

"In the absence of a benchmark, traders have no information other than their own search costs, and what they learn individually by shopping around for an acceptable quote. Dealers exploit this market opaqueness in their price quotes, adding a benchmark alleviates information asymmetry between dealers and their customers, so that was the general conclusion, and then he gives some variety of circumstances that he test that conclusion.

THE COURT: Here benchmark is basically a proxy for your platform?

MR. OLSON: A benchmark in a lot of ways is a proxy for the platform, and that's a point he actually makes in the paper. Now one thing that the papers considers as a variable is how different traders will react to the introduction of a benchmark, and there the model uses this concept of fast traders and slow traders.

Fast traders have no search costs. They can get the best price immediately. Slow traders have hire search costs. In reality, it's a continuum, but this is the principle that's used for the model, and it allows the model to analyze different scenarios.

For example, in this paper, the model assumes that fast traders will enter the market immediately after a benchmark is produced and buy from the dealer that offers the lower price, so it's just a variable in a concept that he used in this the paper.

THE COURT: So he talked about in paragraph 280 of his report. He says -- I think you're talking about the same thing -- he says, there's a table above it and it shows better pricing for all class members, regardless of the stock loan temperature of the customer status is fast or slow.

What I don't understand is how the table shows that? I don't know if you have a simple way of explaining that.

MR. OLSON: That's exactly what I'm about to try to do. Let me try it.

So applied to this case, Dr. Zhu's model shows that when search costs go down for some class members, prices improve for all. And to test that -- and this is where I'll try to explain it to your Honor -- Dr. Zhu uses this concept of fast and slow traders to ask the model the key impact question. What happens to the prices dealers' charge when search costs go

down for some traders, but not all of them?

And as he explains, that's effectively the same way of asking, What happens to dealer prices when some traders start using a multilateral trading platform, because search costs go down to virtually zero on such a platform. Think again of logging onto Kayak. It just takes a few seconds, a few clicks.

So formulaically, how does he do this? As he notes here in paragraph 275, he models this. He makes this change to his model. He changes the variable MU. Specifically, he increases MU by 22 percent, which is essentially estimating that 22 percent of traders move to a platform in the but-for world.

So the initial MU that is fast traders in his model is 28 percent. Now he models that additional 22 become fast by moving to a platform, so that leads to his new variable of MU and I'm going to explain more.

THE COURT: So 50 percent?

MR. OLSON: 50 percent, correct.

His model as he says, using that and other conservative assumptions, which he discusses in his report, his model shows that all or virtually all class members benefit from the introduction of a platform. Whether or not they actually use the platform in the but-for world, and whether or not they are sophisticated in the real world, this holds true even when a relatively small portion of class members actually

begin using the platform.

Now, this is the table where he summarizes the models inputs and outputs. As you see on the left, this is the actual quantitative data from the transactional data in this case that he uses as inputs to his model, and he uses robust amount of transactional data.

These data inputs show the prices that are paid on what we call the L1, which is the lending side, L2 on the borrowing side, and the actual world for what we call cold stock which are general collateral or pretty easy to find, warm stock or hot stock which is sometimes called hard to borrow.

Again, this is the actual data from our market that he uses for this model, those prices and then the spread. And then the next column over has a variety of entries. I'll focus on the MU. You can see there. This is his own highlighting. The actual world versus the but-for world. This is the test. This is the critical thing. What happens when we change the MU, the percent of fast traders, and he's increased it by .22.

"S" is the search cost. This model actually estimates the economic search cost per inquiry that each investor has to make. That's what "S" is. It's calculated through the model. It's a complex calculation, but that's what "S" provides there.

And then by running this all through the model which is, based on the economics of how dealer set prices, then the model implications are in the right column which again is the

actual world versus the but-for world. And what you can see is that for every combination, the bit ask spread, which is essentially the price, is lower in the but-for world than in the actual world. And that applies no matter what happens.

So it's not -- you can actually look at this diagonally. There will be some traders who are slow in the actual world who become fast. Those are the ones who go on the platform, and that's -- if you look diagonally -- you'll see that their benefits are very, very large. But as this model shows, even the slow traders, even the people who stay slow, their prices are going to improve, the price distribution that they get from dealers are going to improve in the but-for world as well.

And so as Dr. Zhu sums it up -- and this is the economic principle that all these numbers are showing. Those who use the platform benefit directly from the enhanced competition. You have many dealers. Those who stay OTC benefit from the price discipline imposed by the platform. The platform has brought a large volume of competition to the market that disciplines prices across the market, and that's what his model demonstrates quantitively.

THE COURT: So to use your Kayak example, just because it's a little easier than using these numbers, the reason why Kayak or another platform brings the prices down, it brings the prices down for me if I use the platform. How is my using the

platform benefiting somebody who doesn't use the platform?

MR. OLSON: There's been economic papers which will prove this too in this market. The reason is, the old travel agents that you had to call on the phone. They use that diamond search model. Where they knew they could quote a higher price than the competitive price because it was going to take a lot of time and effort for you to get someone else on the phone and get another quote.

Now they know that it won't necessarily take you that additional time at all. Now they know if they quote a price that's 10 basis points above the competitive level, you might -- they don't know for sure, and this is a point Dr. Zhu makes -- whether someone is fast or slow is not observable to the dealer. So they don't know, but they know it's possible, that the minute you hang up with them they're going to get on Kayak. And since they know that, they have to discipline the quote they give you. That's the fundamental insight of the model. That's why it won the first prize when it was published. That's why it applies to this case.

THE COURT: What about the time it takes for that discipline to have an effect? Does his model take that -- do we need to take that into account?

MR. OLSON: Well, that's probably more addressed in the yardstick analysis, which I'll get to. But the short answer is, it happens very, very quickly. Because once the

platform goes on, it's right there. The other analogy Dr. Zhu uses in his own report is Amazon. When you walk into a store now, the people selling you the things in the store know that you might pull out your smart phone and check the price on amazon, and so they can't quote a price that's way higher than what's on Amazon. They won't get the sale. This is how economics works.

Now one notable thing for the Court to understand is that Professor Hendershott, the only financial economist that defendants have as an expert and their lead impact expert, doesn't and criticize Dr. Zhu's economic search model. And the reason for that, likely, is because he was actually one of the many financial economists who reviewed the paper in the model before it was published and provided comments. Having done that, he understands the model. He understands that it is well-supported in the economics, so he doesn't criticize it.

Instead, the defendants' criticisms come through Professor McCrary, the law professor who has no relevant academic experience with these OTC market structure issues.

Now our experts addressed every single one of Professor McCrary's critiques before turning them on pause on the legal standards, and this will get me to the *Air Cargo* case.

As *Olean* explains, citing the Supreme Court decision in *Amgen*, we don't have to prove we will win at trial to gain

certification. We don't have to prove that the jury will necessarily choose to believe our experts over the defendants' experts. We just need to prove that we are capable of proving our case to a reasonable juror on a classwide basis by relying on our experts' work, notwithstanding the defendants' critiques, that's the legal standard we clearly needed.

And as I said before, the law in this Circuit is the same. As Magistrate Judge Pohorelsky explained in the *Air Cargo* litigation where an expert actually gave a similar type of model illustrating market structure.

Expert testimony as he says, quote, "Need not be flawless or impenetrable." Meaning, everything is subject to critic. As he said, Indeed almost no testimony ever is, and the fact finder will ultimately weight the testimony accordingly. He said, here the sole questions for the court in this battle of the experts.

One, is the expert evidence common to the class? Here it is. Search model is common to the class, the other analyses are too. Is it methodologically capable of answering the question? Of course, here it is. As we just went over, this model is capable of answering the question, When some people go to a platform, does that discipline prices across the market? So is the yardstick analysis, etc. And could a reasonable fact finder rely on it? Of course they could. Here, it wasn't just fact finders that relied on this model, it was peer reviewed

and published and one the first prize in a leading economics journal.

Now to his credit, Magistrate Judge Pohorelsky said this standard before the Supreme Court three years later, essentially adopted it in the *Tyson* case. This no reasonable fact finder standard is the legal standard that governs, and the magistrate judge in that case was ahead of the Supreme Court there.

So Professor McCrary's criticisms, which I won't go into all of them, but they are unsupported, unpersuasive at every turn. Here's one example. Professor McCrary purports to acknowledge that search models are, "commonly used in the economic literature on search," but then just asserts that they're not applicable to this market. "But they are not applicable to OTC stock lending shorting services, period."

He doesn't cite a single economic paper supporting this conclusion. There is none. He just says it. And, in fact, he's clearly wrong. It's not just our experts who say that. Financial economist have applied this very model to OTC stock lending markets to study the very types of questions at issue in this case.

Here is a February 2021 paper applying Dr. Zhu's model. It's called DDZ here because he's the "Z" as co-authors to the Brazilian stock lending market to determine the impact on investors of changes to the loan fee benchmark in that case.

And notably as our experts point out, the authors overall in this found that the overall benefits of increased transparency were positive across the markets, so this rejects many of Professor McCrary's unsupported assertions that somehow his model can't be applied to this market.

Now, Professor McCrary makes another argument. You might hear it today. He says, "The results of this model don't apply to class members who wouldn't actually use the platform."

Now we've already talked about why that's wrong, your Honor. It's because when I call the travel agent on the phone, the travel agent doesn't know if I'm going to use Kayak or not, but has to account for that possibility.

Professor McCrary doesn't cite any economic papers finding this conclusion that somehow in a market like this the dealers could pick out people who wouldn't benefit from any price discipline. He just asserts it. He says they could figure out which traders wouldn't use the platform and just punish them, keep their prices high even while everyone else gets discipline. There's no economic support for that.

This is Professor Pathak who is essentially taken over for Professor Zhu after he moved over to the SEC, and this is in the surreply report, and he explains that the economics underline Dr. Zhu's model squarely rejects this notion. For a dealer to pull this off, they would have to have absolute perfect knowledge that it was impossible for the class member

to use a platform. The economics is very clear on this. Defendants haven't pointed out anything to the contrary. That's the only way they could really gouge somebody.

And in the real world, prime brokers can only have imperfect knowledge. There's no way to have that perfect knowledge about what they can't observe, which is what the class members doing in the background. Dealers in OTC markets have uncertainty about the outside options for class member, and that uncertainty makes prices improve when platforms enter.

We've talked a lot about the search model. Dr. Zhu didn't stop there. He also conducted a yardstick analysis to further test his core finding, that when search costs go down for some, prices improve for all. Specifically analyzes other financial markets where developments increase transparency and reduce search costs to see what happen there.

And as he explains, every comparable market that I studied had market-wide benefits for all or virtually all traders in the market. And as he further explain in response to your Honor's question, that always happened very quickly. That includes in the stock market which is his first yardstick, because for the many reasons he's explained is the most comparable.

Dr. Zhu explains and quantifies, uses a lot of data, to show how limited improvements and competition in the stock market had large quick market-wide benefits for investors.

These include the SEC's introduction of an order handling rule. I won't get into the details of that, but Dr. Zhu does -- Spreads quickly and dramatically fell across the marketplace every type of trade.

So defendants -- a yardstick analysis of course is an accepted impact analysis. So defendants say, well, your Honor, this one doesn't work because the stock market is not analogous to the stock lending market because one involves buying and selling stock. One involves borrowing and lending.

THE COURT: Are there any markets where it didn't work?

MR. OLSON: No, I don't believe there any markets. That is Dr. Zhu's conclusion, and that's why defendants feared this so much. That's why we see them conspiring because they knew what would happen.

(Continued on next page)

MR. OLSON: This distinction doesn't work, as Dr. Zhu points out, analogous to home sales and home rentals. Defendants are essentially saying, because one is selling, one is renting, they are completely different. They don't inform each other.

But as Dr. Zhu points out, people who are looking for a place to live often consider renting or buying as alternatives. People that have an extra house often consider selling or renting as alternatives. There are obvious linkages.

THE COURT: I mean, the two ends of the market that we have here are totally different. There is not really overlap between the borrowers and the lenders.

MR. OLSON: No.

THE COURT: They are entirely different populations unlike in the rental versus sale of home.

MR. OLSON: The point is that the stock lending market involves borrowers and lenders. The stock market involves buyers and sellers.

THE COURT: Right.

MR. OLSON: Defendants are saying because one is just borrowing and lending, one is buying and selling, there is nothing informative about the experience of the stock market.

Dr. Zhu is explaining that, as an economic matter, that difference is not that significant.

THE COURT: OK.

MR. OLSON: That is the point there.

THE COURT: OK.

MR. OLSON: He didn't stop at the stock market.

Before we even knew who defendants' expert was, he also discussed the corporate bond market. This is a market that provides a very strong, natural experiment here. It was OTC that all these search cost problems, a platform entered, and it's been widely studied by economists.

In fact, one of those economists was Professor Hendershott, their expert. This is one of his papers that Dr. Zhu cited before he knew he was an expert for them where, Professor Hendershott looked at the introduction of market access in electronic platform in 2010. Now, market access is an auction, it is not a full exchange. But it is a platform and it allows investors to get multiple quotes.

And Professor Hendershott found it quickly led to more competition and better prices. Indeed, in his paper, he said that investors saved $2 billion a year, and that was a conservative estimate. He said repeatedly, This calculation is conservative. It actually ignores other benefits to competition that investors received.

But once he was hired in this case, as I said, he has to try to obscure the significance of his own academic finding.

(Video played)

Your Honor, I'm going to move a little quickly, but suffice to say, Professor Hendershott's effort to quibble with his use of the word conservative is not persuasive. The SEC relied on the corporate bond market's experience as a yardstick, too. Foreign stock loan market support, Dr. Zhu's concluded, these are all discussed in the papers.

THE COURT: I get the point.

MR. OLSON: Brazil as well. The final analysis -- I'll be quick here, it's in the paper -- he also tests this by looking at the quantitative data from AQS in the real world, even though it was being crippled by the boycott, borrowers and lenders were paying less on virtually all of their trades. He finds that to be further quantitative support.

All right. Let's get to defendants' arguments. They say, Hold on here. You overlooked something. There is this super important thing that prime brokers provide called maturity transformation services, recall and rerate protection, and Dr. Zhu failed to look at it and so none of this holds up.

These arguments fail for several reasons. For one, as we have seen, Dr. Zhu proves all class members get better prices even if they wanted to continue to use prime brokers and get whatever services they provide, because of that price discipline.

But, more importantly, defendants utterly failed to support their claims that prime brokers provide these economic

available services. The expert reports discuss dozens of detailed studies of the market. Many discuss the role of the prime brokers. We asked Professor Hendershott to identify one article that supported his claims that dealers provide these services. He couldn't. Not one piece of economic literature says anything about prime brokers providing these protections.

(Video played)

He couldn't identify one article. He blames it on the lack of data. In fact, a lot of economic literature has tons of data. He had a lot of data. They still use virtually none of it to support their claims about these protections.

Professor Hendershott did no empirical work on recall protection. Dr. McClary looked at a few days for two stocks. For a rerate, McClary did no empirical work. Professor Hendershott did analysis of one stock on prime broker.

To visualize just how little data they used, this is a representation of all the data defendants' experts had available to them. There are approximately 165,000 squares here. They used, if you rate -- I'm having a little trouble with the screen if there is anything you can do -- they used just the data on the bottom left, 80 total CUSIP days, to support their claims about these rerate and recall protections. This is cherry-picking in the extreme. If they actually could prove this, they would be able to cite a lot more data.

Instead, they mainly rely on ambiguous snippets from

documents and self-serving declarations, often drafted by the alleged coconspirators, like Mr. Wipf and Mr. Kelleher, two of the people we accuse of being practicably involved in the case. That is what they have relied on. The high-tech case they pointed out really didn't hold up.

They also put in a couple industry experts, but these just recycle those self-serving declarations. This is Mr.Pridmore, who purports to be a lending expert. He says, actually, you know, the costs of platforms are too high to lend. Footnote, what does he cite, your Honor? One of these declarations from one of the coconspirators. Then, at his deposition, he admitted he just took whatever they said at face value and did no independent analysis.

So here is the bottom line on recall protection. At most, prime brokers provide a very weak form of recall protection, where if a loan is recalled, their clients can substitute a new loan for the recall loan. They don't protect the client from having to pay a higher rate. That would be rerate protection. It might be valuable, but it doesn't happen. And that weak form of recall protection has little economic value and can be and is provided by platforms, including, as Dr. Zhu points out, the Indian Stock Lending Exchange today, it has automated recall protection.

The bottom line on rerate protection is defendants were utterly unable to prove that prime brokers provided at

all. Professor Hendershott's sum total of his work on the data was to present two charts of JCPenney stock. He didn't run any known economic test on those charts. He claimed, through his visual inspection, he could see smoothing of the rates on the charts. This is what he offers to the court to prove his case, smoothing.

(Video played)

Of course it was here. It was his own term. Your Honor can see the transcript. He doesn't go on to be able to identify whatever he even means by smoothing.

Our experts have shown, in fact, that in a sur-reply, Professor Hendershott tried to scale it back to a slightly different analysis. He still didn't define smoothing. Our experts have shown that whatever smoothing means, if it happened, it actually harmed the class members that Professor Hendershott identified rather than help them.

In the end, this one is worth hearing because defendants defendants' arguments about these protections and services only underscore how opaque and inefficient the OTC market is for class members.

(Video played)

He had no answer.

THE COURT: What about the prime brokerage agreements, there is not a retrade provision?

MR. OLSON: No. There is not a recall provision.

There is no protection provision in any of the contracts.

But this encapsulates all of it, because Professor Hendershott gets up and says, This thing is so valuable, rerate protection is so valuable, prime brokers provide it.

We say, How would you shop for it if you were in this market? He could not answer the question. He eventually stumbles around to say, Maybe I would call people on the phone, try to get them to talk to me, maybe they would tell me some things and I would call other people. That only highlights how opaque and inefficient the market is for class members. It would improve in the but-for world with more transparency.

All right. One other argument I would like to present briefly. Professor Hendershott said, Listen, if platforms in the OTC market would shrink, the services would be reduced, things would be worse for people who want into OTC. He cites this textbook. He says this textbook proves it, and he cited this -- the language is in green -- within any given market structure, liquidity is greatest when transaction costs are lowest when all traders trade in the same structure. He is saying this textbook says everyone is better when they don't have choices, when we all trade OTC.

But the textbook goes on to explain that these concerns are not well-founded in a market like this one. It says these concerns would be well-founded if traders in various market fragment did not know about -- and respond to -- market

conditions in the others. If people who want to trade OTC didn't know about the platform, and some people couldn't do both. It says when traders can, when some can trade in both -- this is the second highlighted language -- and choose and observe price in both, then it coalesces into a unified complex and a unified market where traders have choices.

As Dr. Zhu points out, this is when you have two reservoirs where liquidity can flow between the two and that case liquidity actually increases. Fundamentally, your Honor, on information leakage, they say no one would want to use platforms, don't want to give away information. That is wrong very quickly.

First of all, in the OTC world, all traders have to give away a lot of information to the prime broker. Having a platform increases their options for hiding what they are doing and making it more obscure. They have more places they can go to place trades. When you place trades on exchange, you don't identify who you are or your positions. Investors in many, many markets, including the stock market, have ways to minimize the risk of giving up information and platforms. Fundamentally all their arguments fail for this basic reason. All class members are harmed by being denied competitive choices and options. As our experts explain, competition benefits everyone, a world of choice is always better, and of course that is what Professor Hendershott proved with the corporate

bond market.

Thank you.

THE COURT: The anonymity feature of your proposed platform is so that people don't know what other people's -- firms don't know what other firm's trading strategies are.

MR. OLSON: I'm sorry. Yes.

THE COURT: But there is a reference to, I think in Dr. Zhu's report, in one place he says it is possible it could be not anonymous.

So is the anonymity a required feature or not a required feature of the platform?

MR. OLSON: Not all platforms are anonymous. The AQS model, sort of central to our case, was. Exchanges are anonymous. Most multilateral trading platforms are anonymous. There are some more interim steps which we think, frankly, without a boycott, there would have been a variety of things for class members to choose from. There are interim steps that are called request for quote models, and sometimes those can be anonymous, sometimes not.

THE COURT: OK.

MR. OLSON: Any of those options would have been better for class members. Any of them would promote the price competition and discipline. The best is the AQS-type model, which is actually anonymous.

THE COURT: The best, but not necessarily required,

the anonymity feature?

MR. OLSON: Correct. It is not the only way of having multilateral trading.

THE COURT: OK.

MR. OLSON: All right. Your Honor, I have gone, I think, my time limit. I'll pause there.

THE COURT: That's a good place to stop.

Why don't we take five minutes and we'll be right back.

MR. OLSON: Thank you.

THE COURT: Thank you.

(Recess)

Mr. Olson, I had one followup question about Professor Zhu, before we shift to damages, if I can just ask you.

In paragraphs 174 to 82 of his first report, he references to DTCC evaluating a central clearing counterparty, I think, in 2017.

Do you know what became of that effort?

MR. OLSON: This is not a softball, your Honor. Folks will correct me if I'm wrong, but I believe that the DTCC has launched some sort of clearing solution --

THE COURT: OK.

MR. OLSON: -- for the stock lending market.

THE COURT: OK.

MR. OLSON: But the point there is defendants --

because of what we have said, it's moving forward right now, it's being tested -- but defendants are not allowing it to connect to a multilateral trading platform. Even if that clearing solution takes place because of the conspiracy, there won't be a trading platform with it.

THE COURT: OK. Thank you.

Is there evidence, when you say the defendants are not allowing it to connect, what's the evidence that you have that supports that?

MR. OLSON: Well, the evidence, the main piece is the agreement they made in 2015 with those core principles, which we have never seen any evidence that they are repudiated, those core principles at all, and there is no multilateral trading occurring in the market today. Everyone who tried was put out of business and there is -- none have succeeded.

THE COURT: All right. Thank you.

All right. Damages.

MR. BROCKETT: Good morning, your Honor. Dan Brockett from Quinn Emanuel. So, yes, let's move to the question of damages.

The first point that I want to address on the issue of damages is the burden of proof. So what is the burden of proof that's imposed on a plaintiff to estimate classwide damages in an antitrust case?

Well, the first thing to note is that this burden is

lower than it is in a normal case. As you can see from the quote here in the Namenda case, Chief Judge McMahon who wrote that the plaintiffs' burden is to ensure that the aggregate classwide damages roughly reflect the level of damages incurred by the class as a whole. On a particular note, we do not have a burden at class certification to quantify each class member's individual damages. We need only provide a rough approximation of classwide damages.

Now, as Judge Cote has written, the antitrust plaintiff's burden is actually lightened and there are several policy reasons for this. One is that the but-for world does not exist because of the alleged bad acts of the defendants. It would, therefore, be perverse to penalize the plaintiffs for not achieving perfection in a world that the defendants prevented from occurring.

Now, as I've said, plaintiffs need only estimate aggregate classwide damages, and we can see here that point in a quote by Chief Judge Wood of the Second Circuit who writes, at the class certification stage, plaintiffs are not obliged -- I'm sorry, I'm having a little technical difficulty. It keeps going off.

THE COURT: Mine is, too.

MR. BROCKETT: Chief Judge Wood wrote, at class certification, plaintiffs are not obliged to drill down and estimate each individual class members' damages. So the

question of each class member's individual damages is an allocation issue that is determined later.

OK. Now, for purposes of class certification, I want to stress that our damages model uses a common methodology and common evidence. The model can do this, first of all, because it uses millions of transaction records that were produced by the prime broker in discovery. These are the stock loan trades that were carried out by the class members during the class period. The data is enormous and all relevant trades have been included.

Now, because the model is based on transaction data, it uses evidence that is common to the class and its formulaic. Once we know the actual world price, which we get from the transaction data, and the estimated but-for price, it's a simple math to calculate the damages to each class member on every trade.

The model is also capable of arriving at a reasonable estimate of aggregate classwide damages. It looks at each of the millions of transactions, makes reasonable, indeed, conservative assumptions about prices in the but-for world, and then adds up the damages from each trade. Then finally, although not required, the model will be able to determine the damages that each class member at the time of trial.

Now, here is an example at a very high level of how the damage model works. So, at the highest level, the model

compares actual world prices to estimated but-for world prices and takes the difference as damages.

OK. So let's look at Tesla on August 30 of 2016. So this is one day in the class period. On this day, the average real world lend price for Tesla was roughly 1,099 basis points and the real world borrow price was 1,379 basis points. So the prime broker spread was 280 basis points on this day. This is from the transaction data.

Our experts calculate the but-for Tesla price on this day was 1,235 basis points to borrow and 1,164 basis points to lend. So a class member that had an active borrow or lend transaction for Tesla on August 30 of 2016 would be allocated damages based on their real world price as compared to one of these but-for prices. And you can see here the end user has 144 basis points of damages and the beneficial owner has 65 basis points of damages.

That's essentially the mechanics of how the damage model works.

THE COURT: Assuming those are the mechanics that hold through trial then, how do you envision this working logistically at trial?

That the experts would simply run all these calculations and then present the calculations to the jury, or something else?

MR. BROCKETT: Yes. At trial the experts would be

called to the stand and they would present to the jury an aggregate classwide number of damages. We don't envision at this point -- although this could be subject to some discussion -- we do not envision at this point that the jury would make a separate determination of each individual class member's damages, even though the model is capable of doing that. But rather, there would be an allocation, prove-up proceeding that would occur after the jury has made its determination of aggregate classwide damages.

THE COURT: OK.

MR. BROCKETT: Now, if we move to slide eight, on the process that I just described for Tesla on August 30 of 2016 was applied to every stock on every day across the class period and the end result is aggregate classwide damages.

Here, you can see that number is about 5.3 billion for the end user subclass and 2.2 billion for the beneficial owner subclass. So all together the model shows aggregate classwide damages of about $7.5 billion.

THE COURT: So there is a dispute about when the class period should end?

MR. BROCKETT: Yes.

THE COURT: So was data for post 2017 produced?

MR. BROCKETT: The data for post 2017 has not been produced. We produced this number by essentially just scaling up from the information that we have.

THE COURT: OK.

MR. BROCKETT: But you are correct, we do believe that we should have the transaction records post 2017. So we can update the damage award, and there are really two reasons for this. I have some slides on this. The first is that the defendants have never withdrawn from this conspiracy. There is no legal prohibition to extending damages, to extending the damages period to the date of the class certification motion.

Secondly, but more fundamentally, nothing has changed, as you had the discussion with Mr. Olson about this. The SEC has pointed out, the stock market remains opaque, the significant price dispersion, no multilateral trading platform has ever entered the market, and there is no pre- or post-trade reporting mechanism at this point in time.

Now, yes, you're probably about to ask me this. But yes, we would need some supplemental discovery. As you can see here on the screen, these are quotes from various cases that support the notion that after class certification in a big case like this, it is fairly routine that there is some supplemental discovery that takes place. This is very routine, and we would ask for some additional transaction data to be produced so that we can update the damage model and there may be a few other issues as well. But that is something we would have a conference about after the decision on class certification to determine what discovery needs the plaintiffs have and what

discovery needs additional discovery needs the defendants may need as well.

THE COURT: So would that distinguish it from Judge Lynch -- the Judge Lynch case, I think it is Hnot, if that is how it is pronounced -- there I think he was addressing a discovery request in the first instance and followed by request to amend the class period.

So you're saying we would be reversed here, assuming the court grants the plaintiff's request to have the class period go through February 2021?

MR. BROCKETT: Yes, that's correct.

Now, what do the defendants say about our damages model?

Well, they don't really challenge the damages model as a bad damages model. They actually spend only a half a page of their opposition criticizing the damages model. Instead, they spend most of their time attempting to highjack the damages model and use it as a weapon to show alleged lack of impact.

Now, we can call this the Professor McCrary gambit, as it is Professor McCrary, the Columbia Law professor, who carries the defendants' water on this point. Now, Professor McCrary attempts to use the damages model to show a lack of impact is wrong or fails for three basic reasons. I'll discuss each of these in turn.

First, as I'll discuss in the next couple of slides,

impact and damages are legally separate elements of the plaintiff's claim, and Professor McCrary is wrongfully conflating them.

Second, Professor McCrary's attempt to show large numbers of supposedly undamaged class members relies on a blatant data input error that skews his calculations in material ways. I'll walk you through that as well.

Third, Professor McCrary uses a netting analysis in a way that is not only legally improper, but is manifestly incomplete on the record before us.

Now, let me discuss each of these points in turn, impact and damages. First and foremost, Professor McCrary wrongfully conflates damages and impact. These are legally separate elements of an antitrust claim, as we see in the quote from Judge Castel above who has written, Courts have distinguished the fact of injury from the amount of damages. Impact is essentially a causation question. How do we connect the conspiracy to the harm. Damages, on the other hand, asks us to calculate the amount of the harm. In our case, Dr. Zhu's report addresses the question of impact and the Asquith-Pathak model addresses the separate question of damages.

Now, the Ninth Circuit recently was presented with the same playbook that Dr. McCrary attempts here. In this case, the Olean case, which we submitted to the court as supplemental authority, the defendants tried the same gambit. They made

tweaks to the plaintiff's damages model in an effort to pump up the number of so-called undamaged class members. This is the same thing that Professor McCrary attempts to do here. He changes the parameters and inputs to the damages model, runs tables purporting to show large numbers of undamaged class members, and then he claims that he's defeated impact and defeated class certification.

But the Ninth Circuit rejected this same attempt and explained that defendants' tweaks to the damages model were at most critiques defendants could litigate at trial. Applied here, Professor McCrary's defendants' argument about supposed undamaged class members is, at most, a rebuttal defendants' argument for trial. It does not defeat class certification, especially given that Professor McCrary offers no model of his own and makes no factual findings as to the number of supposed undamaged class members.

Now you may ask, you may fairly ask, your Honor, how is it that a class member could be impacted yet show no damages under the damages model? Well, the answer is simple. Our damages model makes a number of conservative simplifying assumptions that do not seek to capture every facet of the market. To give one example, our experts deploy a single but-for price for each stock on each day. One but-for price for each stock for each day. But in reality, the borrow price for each stock likely fluctuates throughout the day. A stock

could have one price in the morning and another price in the afternoon. Our damages model does not attempt to capture these inter-day price swings. Our damages model simply, instead, estimates only a single but-for price per day.

So you could have a class member who bought at one price in the morning and there have been a big swing in the price of the stock by the afternoon, and the model would estimate a single but-for price, and where the defendant -- where the plaintiff actually purchased the stock, OK, was a better price than the but-for price. And that circumstance, there would be no damages assigned to that trade. But that doesn't mean that class member is not impacted under Dr. Zhu's analysis. Again, once causation, once the quantum or the amount of damages.

Now, the second fundamental error in Dr. McCrary's analysis is his improper use of the data, specifically the UBS data. Now, to achieve his large number of supposedly unharmed class members, Professor McCrary includes millions of UBS stock loan trades that he himself admits, that he himself admits should have been excluded from the damages database.

First, almost all of these transactions were carried out by the UBS wealth management group, not the UBS prime brokerage business. These trades are therefore not even within the scope of the class definition. The class is specifically limited to transactions with the prime brokerage business of

the defendants. It does not include trades with the wealth management desk of these banks.

Now, secondly, more importantly, these UBS trade records -- by the way, there are millions and millions of stock loan trades that he has included from the wealth management group, but these UBS records themselves demonstrate on their face that they should have been excluded. 95 percent of these wealth management transactions are shown in the underlying records to have had a zero loan cost. A zero loan cost. In other words, they are not arm's length market base stock loans.

The other thing Professor McCrary does is that he includes thousands, hundreds of thousands actually, of internal UBS accounting documents that are designated as part of the UBS global ledger. These are internal transfers within UBS. They are accounting entries. They are not even stock loans. Yet, Professor McCrary includes over 100,000 of these in his database.

Now, as I'm going to demonstrate now, these errors significantly inflate Professor McCrary's supposed unharmed class member figures. Let me show why. Now, when pressed on this point, Professor McCrary essentially admitted that the UBS trades should have been excluded, as you can see in the quote here. He says in his report that he compiled his database to replicate the data-processing methodology used by our experts. But our experts exclude all nonmarket-based stock loans,

including loans that show a zero loan cost.

Now, at his deposition, Professor McCrary admitted that these UBS wealth management records with a zero loan cost should are been excluded under our expert's screens.

(Video played)

THE COURT: DSS, again? DSS?

MR. BROCKETT: Yes. The DSS records refer to the records that come from the UBS wealth management group. There was a letter, actually, the defendants gave to us to help understand the data, and in their original records, DSS means wealth management group.

THE COURT: Thank you.

MR. BROCKETT: Now, but Dr. McCrary didn't exclude these. Indeed, he stated throughout his deposition, he didn't know whether they had been excluded or not. Now, what is the consequence of this error? Well, I have on the screen here Exhibit 11 from Professor McCrary's opening report. In it, he says that 30 percent of lender accounts and 21 percent of short seller accounts were allegedly unharmed.

Now, the first thing to notice here is that Dr. McCrary does not give a breakdown by prime broker. Now, that is interesting in itself. He just lumps everything together, and there is a reason for that. The reason why he did that, which is actually kind of sneaky, if you go to the next slide, we had our experts break out the short seller

accounts by prime broker. And as you can see, there is something clearly wrong with the UBS data. Whereas all of the other prime brokers are showing supposed undamaged accounts between three percent and seven percent, UBS is showing 61 percent. This is the disproportionate impact of including millions of zero cost loans from the UBS wealth management group and the data bill.

When Dr. McCrary in his chart didn't show this broken out by prime broker, he was trying to hide -- he was trying to hide the fact that UBS was 61 percent. Now, Professor McCrary at his deposition, said he didn't know whether UBS wealth management trades were included in these tables or not, but that is simply not believable. For any prudent economist, your Honor, this 61 percent figure would raise alarm bells, and he or she would have taken steps to investigate why UBS was such an outlier. So either Professor McCrary was grossly negligent and didn't investigate, or he did look into it and he included the UBS records in the data bills anyways.

THE COURT: Just to give him the benefit of the doubt, is prime brokerage businesses, as it is used in the class definition, is that something I should define?

MR. BROCKETT: Yes, the class definition.

THE COURT: Right now it is just a lower case term. If we define what prime brokerage businesses is, does that minimize either --

Do you want to call it a genuine ambiguity or an opportunity to misconstrue, what the class definition is?

MR. BROCKETT: Well, I think everybody in this case knows what the prime broker businesses are, your Honor. Maybe we can sharpen that by giving it a definition. I think everybody in this case knows the difference between the prime brokerage businesses of these banks and the wealth management groups of these banks, which is a completely separate business unit.

THE COURT: OK.

(Continued on next page)

MR. BROCKETT: Okay. Now, one final point about this Dr. McCrary and these UBS records, and that is this:

The UBS raw transaction data had a source -- had a column on it titled "source." You can see that in what's on the screen now, the source column on the right. And Professor McCrary had access to all of this information when he undertook his analysis; but when he produced his work papers to us, he mysteriously dropped the source field column on the right here, that came to us looking like --

THE COURT: What do "ADP" and "GGL" stand for?

MR. BROCKETT: "ADP" refers to -- I believe that's to the prime brokerage records from the prime brokerage desk. And "GGL" refers to global general record. That's the accounting entries that I was talking about.

Now, eventually our experts were able to reconstruct the source field from the raw data, and we were able to restore the source field column here. And then we could see it was at the UBS wealth management transaction, were the ones that were skewing the results. But by dropping the source field code in what they produced to us, the defendants and Dr. McCrary made it look like these UBS wealth management trades all came from the prime brokerage business when, in fact, they did not. See, we didn't have the source DSS ADP GGL. That was all missing in the work papers that were given to us. So on this record, your

Honor, a fair question is raised as to whether defendants' expert attempted to conceal from opposing counsel and the Court the fact that millions of these improper stock loan trades were skewing the results in material respects.

Now, let's talk about Professor McCrary's third fundamental error. And that has to do with the concept of netting. So the cases in this circuit and elsewhere are clear that netting of damages, that's not something that's done at the class certification stage. And so, you see, there are quotes from many judges from many cases on the screen.

Judge McMahon: Antitrust injury occurs at the moment the purchaser incurs an overcharge, whether or not that injury is later offset. Judge Conner, at the bottom, an impacted customer is one who takes at least one transaction at a super competitive price.

So courts in this circuit follow the one transaction rule which says, if a class member is injured on at least one transaction, there's antitrust impact even if that injury is later offset by another trade. Now, there may be a separate question of whether you net damages at trial. That's a completely different question than whether there's been sufficient injury for purposes of impact at class certification.

Now, yes, there are some cases where courts in this circuit have said that netting is required. We're talking

about at the damage stage, not at class certification. But I'm talking about Judge Schofield's decision in *LIBOR* and the decisions -- I'm sorry, Judge Schofield's decision in *FX*, and Judge Buchwald's decision in *LIBOR*. These are cases where a benchmark is being manipulated up and down. And on some days, the class members wins, and on other days it losses. Like LIBOR, it was a benchmark set by the banks. The allegation was that they were moving it up and they were moving it down in whatever way would benefit them the most financially. And those who are trading will have gains and they'll have losses, depending on what their position is relative to where the benchmark is being manipulated.

There are no gains in this case, your Honor. This is not an up-and-down manipulation case. The conspiracy does not cause a benefit to any class member. Our model compares real-world and but-for prices. Sometimes the real world is better than the but-for world for the reasons that I have explained. But that doesn't produce a gain to a class member as a result of the conspiracy; it just shows that the class member did not suffer a loss on that particular trade according to the damages model. So, conceptually, this is not a case for netting, because there are no gains caused by the conspiracy to offset the losses, that's the point.

Now, apart from this conceptual issue with netting, there is a more practical problem here. And that is that any

netting that Dr. McCrary purports to do is just incomplete, okay. He cannot reliably net damages to class members using the data available in this case at this time, and that's because this: As the Court knows, the way the data was produced in this case by agreement of the parties is that class members' identities have been anonymized. The data does not identify class member by name; it simply identifies accounts by anonymous ID numbers. So if you can see on the schematic on the screen, you have a class member. They may have multiple accounts at Goldman, they have multiple accounts at JP Morgan. But right now, each one of those accounts is given a separate anonymous ID number.

You cannot consolidate accounts into one class member within Goldman Sachs, and you couldn't do it certainly across JP Morgan and Goldman Sachs or other prime brokers. The only netting analysis that Professor McCrary is doing is in each account; and yet he's netting each one of these accounts and purporting to reach more broader conclusions about how many class members had been injured. But he doesn't have the data to do that; that's highly misleading. All he's doing is netting within each account.

So Professor McCrary really has no idea whether a class member has net damages or not. He only knows if accounts have net damages. It's not possible to conduct any reliable netting analysis on a class member basis at this stage of the

litigation. Now, I will say that by the time of trial, we will have the data to do this. And if the Court believes that netting is required for purposes of the damages analysis at trial, we will be able to do this on a class member basis. But what Professor McCrary has done here now is incomplete; it's misleading. He doesn't even disclose to the Court this problem.

THE COURT: So the data that you need to have produced to you to do that analysis, if it's necessary, is what, just the identities --

MR. BROCKETT: The de-anonymization key by the banks. At that point in time we would then be able to consolidate the accounts, yes.

Now, so what happens when we correct Professor McCrary's errors? Well, we can look here on the chart here. This corrects for improper netting of accounts, and this also corrects and removes the UBS issue. And you can see this is from the reply report of our expert. It shows there are only 13 end-user accounts and 16 beneficial-owner accounts that do not have positive damages under the damages model. That means the vast majority of accounts, over 99 percent on both sides of the market, have positive damages under the damages model, after we correct Dr. McCrary's errors. So our damage model is perfectly consistent with Professor Zhu's impact model.

Now, I want to get very quickly to the question of

conflicts. This is an issue the defendants have raised.

THE COURT: Before you get to that, if you're the right person for me to ask this. The class definition, the threshold, is 100 transactions.

MR. BROCKETT: Yes.

THE COURT: Why is it 100? Why not 200, 1,000, 50? How did we decide it was 100?

MR. BROCKETT: Because we just wanted to make sure that each class member had a sufficient number of transactions so that this wasn't just an idiosyncratic thing. And so we wanted to mete out -- ten transactions over the class period is not very many. A hundred transactions over the class period is not a huge number, but we thought it was a sufficient threshold number to make sure that we are picking up class members who are going to be really damaged, not class members who trade every once in a while on an idiosyncratic basis.

THE COURT: Okay. So the experts seem to take 100 as the threshold they were given. If I missed it, you can point it out to me, but is there someplace where they opine that 100 is the number that we should be using?

MR. BROCKETT: All the experts' models are based on the assumption of 100 -- that each class member -- in order to be a class member, you have to have a threshold of 100 trades. So they built that into the damage analysis is what they've done, yes.

THE COURT: Are there other examples of cases where we've used sort of a threshold as part of the class definition in the antitrust context?

MR. BROCKETT: Yes. I think that in all cases you have to define a class in such a way that you have -- that you're capturing the individuals who are really being injured by the conduct, as opposed to, like I said, sometimes there are stray people who get caught into the class who really aren't the intended focus of the conspiracy.

So, yes, I mean, I think in every class action you have to -- you have to consider whether you have to make some tweaks to the class to make sure the class is encompassing only those people who are truly injured.

THE COURT: Okay. So do we know for the average class member, is 100, sort of, the median number or -- obviously they have to be over the threshold. I'm just trying to figure out how quickly would a class member get to 100. Is that like a year or two years or --

MR. OLSON: Your Honor, if can just jump in and make one brief clarification.

THE COURT: Sure.

MR. OLSON: It is 100 days. Each loan date, it counts as one. So one single trade that went for 100 days would qualify. It is an extraordinarily low threshold.

THE COURT: I see. Okay.

MR. OLSON: Virtually 99.99 percent of people who trade are going to easily meet that threshold. The reason why we used it is because in very rare circumstances there are people who have special-purpose accounts where they pop in the market for some purely idiosyncratic reason and just have a trade for one day. They are not players in the market. And so this 100 is actually a very extraordinarily low threshold and is really meant to just encapsulate the people who are borrowers and lenders in the market.

THE COURT: All right. Thank you.

MR. BROCKETT: Okay. To move on to Rule 23(a).

THE COURT: Yes.

MR. BROCKETT: Okay. So the defendants' main argument here is that there is a fundamental conflict, they say, between the lender subclass and the short-seller subclass.

The first thing I just want to note here is that borrowers and lenders have many common interests here with respect to all key elements of the case. For example, borrowers and lenders both have a common interest in proving liability and showing class-wide impact. Borrowers and lenders have a common interest in maximizing the total damages award. And finally, if there's any conflict between borrowers and lenders, it relates only to the allocation of damages. But even on that issue, borrowers and lenders alike have a common interest in ensuring that the damages in apportioned

methodologies are reliable.

Now, the case law overwhelmingly supports our view of this, that there's no fundamental conflict here. And here you see a quote from Judge Sweet from the *NASDAQ* case. This case is exactly like *NASDAQ*. Defendant stood in between buyers and sellers, and were alleged to have engage in anticompetitive conduct to inflate the cost of their services for both sides of the market and any conflict related only to allocation of damages between buyers and sellers.

And here's a quote from Judge Kaplan from the *Auction House* case, making essentially the exact same point.

So the case law in this circuit is directly on point and uniformly supports the conclusion that there's no fundamental conflict here.

Now, there's also other lines of -- there are cases in the securities law context which have also uniformly rejected the notion of a fundamental conflict when different groups of class members argue about the time period when the stock at issue was inflated.

Here's Judge Brieant making the same point in another case.

But on a broader level here, your Honor, as your Honor knows, there are innumerable decisions that class counsel makes in any class action that impacts different groups of class members differently. For example, when do we start the class?

When does the class period start? Well, some class members would want one date over the over. But class counsel must make a decision for the class as a whole. And clearly, decisions of this nature do not give rise to fundamental conflicts.

Now, it's also the case that defendants really have no interest whatsoever in how we allocate damages among the class members. And here you see many quotes from many cases. For example, Judge Bacharach on the top: We reject defendant's challenge to the allocation of damages because defendant has no interest in the method of distributing the aggregate damage award among class members. That's from the *Urethane Antitrust* trial. And all these quotes essentially say the same thing.

Now, the defendants point to Second Circuit cases, particularly the *In Re Payment Cards* case and the *Literary Works* case that concerned settlement classes. Settlement classes. Okay. These were settlement-only classes, which are particularly vulnerable to conflicts of interest. Settlement-only classes are not battle-tested through the adversary process and, therefore, are more closely scrutinized, a point the Second Circuit made clear in the *Payment Card* case. And my screen is gone. Okay. Yes. Thank you.

So I was about to point to the quote here from Judge Jacobs in the Second Circuit, where he says as in *Amchem Ortiz Literary Works*, settlements that are approved simultaneously with class certification, are especially vulnerable to

conflicts of interest because the imperatives of the settlement process. For this reason, we scrutinize such settlements more closely.

But here, this is a litigation class, it's not a settlement class. Because this is a litigation class, both the borrowers and the lenders have an interest in putting forth an allocation that is reasonable and objective and can withstand the defendants' attacks. So the fundamental concern expressed by the Second Circuit in *Payment Cards* and *Literary Works* about conflicts of interest and the settlement-only class are simply not present here.

It also merits mention — and this is a very important point, your Honor — that the class here, all the class members here are going to have an opt-out right, okay. If and when this class is certified, we give notice to the class. We have an obligation to describe the supposed conflicts that defendants are talking about, and we will disclose them to the Court's satisfaction in the notice. And any class member who thinks that there's a real conflict here that concerns them can opt out of the class and pursue their own claim.

So the very fact that you have an opt-out right is very significant here and distinguishes the *Payment Cards* case, which involved a class where they had no opt-out right. It's a mandatory no-opt-out class, and that also was a major concern of the Second Circuit in the *Payment Cards* case that's not

present here.

Now, this slide here shows that, in many respects, you don't even have a conflict at this point, where class certification we're going to have summary judgment, we're going to have trial at which we're going to get an aggregate class-wide damage. Then we have the allocation phase. The only point that any conflict would arise is at the allocation phase of the case, which comes after settlement and after trial.

Finally, I just want to make one last point on superiority. The defendants' main argument here centers around the claim that there were a small set of seven class members who earlier expressed -- get the right slide. Here we are.

Let me explain what happened here.

When we first sought data discovery from the banks, we were contacted by a group of hedge funds who told us they were concerned about the confidentiality of their trading strategies. Now, to address this concern, we agreed, for purposes of discovery, to anonymize the data, and it was produced to us in this way by the banks.

Nonetheless, seven hedge funds decided to opt out of the case at that point. This decision had absolutely nothing to do with the merits of our case or whether it's properly litigated as a class action. They simply did not want to have to produce in this case under a protective order or not their

confidential trading strategies; and so they decided to opt out of the case. This doesn't say anything about superiority; this doesn't defeat the fact that a class action remains the most efficient way to resolve this case, all the common issues we have. We have the question of liable, question of damages. I mean, certainly you wouldn't want each -- you certainly wouldn't want each individual class member to have to try the case of liability over and over again in a massive lawsuit of this kind; and so litigation of the common issues will certainly promote judicial relief.

Now, finally, your Honor — and this is my last comment and I'm going to turn this over to Ms. Levens — at this point in time, what we have shown with respect to the three most important elements of an antitrust action, and that's liability, that's impact, and that's damages. We've demonstrated that all three of these can be proved — can be shown — with models that are based upon common evidence and can show these issues -- prove these issues on a class-wide basis.

Now, the defendants argue, Well, even if that's true, we have all of these individual issues we plan to litigate, to which I say, Okay. So what? Bring them on. The defendants have a right to litigate their defenses, that is true. But the essential point is that when the plaintiffs have demonstrated they have models capable of proving the three main issues in the case — liability, impact, and damages on a class-wide basis

— defendants cannot defeat predominance by threatening to overwhelm the trial with all of their common issues. The defendants are entitled to a fair trial; they are not entitled to an infinite trial.

And unless the Court has any questions, I'll complete it there.

THE COURT: Not at this time.

Ms. Levens, please proceed.

MS. LEVENS: We wanted to take a few moments to talk about the cost of platform trading in the but-for world. These costs come up in a variety of contexts throughout the briefing and expert reports, so much so that we thought it would be useful to address them in their own separate module.

Now, at the outset we should note that the Court does not need to untangle — let alone resolve — all of the parties' numerous cost disputes to certificate the class. Costs are just one variable in the Asquith-Pathak damages model, and of limited relevance to Dr. Zhu's impact analysis. Experts disagree about variables all the time. But as the *Air Cargo* court recognized, these sorts of disputes, quote, deal in a level of minutia that would be inappropriate for the Court to resolve at this early stage. As such, costs are of limited relevance to today's proceedings.

As to damages, defendants argue quite vigorously that the cost variables incorporated into the Asquith-Pathak damages

model are incorrect. But today is not the time to determine whose damages estimates are correct. All plaintiffs need is a damages model that produces a reasonable estimate of the class's harm.

As for impact, Dr. Zhu's analysis predicts market-wide price improvements following a shift to platform trading of just a small subset of the market. Costs are relevant to this inquiry only to the extent they affect the viability of the platform. As long as plaintiffs have common evidence that the benefits of platform trading would have exceeded the costs of operating the platform, costs are no bar to viability. This question of platform viability is a core common question in the case, the existence of which supports certification.

Plaintiffs have the better argument on the common question of platform viability. Countless financial products have been trading on electronic platforms for decades, and there's really no reason to believe that this market would be any different. This is borne out by the fact that functioning stock loan platforms do exist in countries untouched by defendants' conspiracy.

Indeed, several sophisticated market participants, including defendant Bank of America, the OCC, two prominent hedge funds and three significant exchanges, all concluded that trading in the U.S. stock loan market on an exchange would be viable. In fact, some of these entities invested millions of

dollars in their faith on that belief.

Because of defendants' conspiracy, we can't know what the exact costs of operating a platform would have been in the but-for world. To estimate what those costs might have been, Dr. Zhu analyzed NASDAQ's operational costs, as well as the fees charged by stock loan platforms in Taiwan and Malaysia, and he found that, across the board, these figures were quite low. His conclusion is backed up by a recent study by Professor Budish, an economist from the University of Chicago, who analyzed the trading fees at the three largest stock exchange families, and found that those fees were incredibly small: .0001 percent per side for a stock worth $100. That's the equivalent of .01 basis points.

To estimate the benefits of platform trading, Dr. Zhu started by recognizing that in an OTC market, prime brokers pay beneficial owners one price to borrow the security, they add a spread, and then they loan that same security to end users at a hire price that includes the spread. A platform cuts out the prime broker middleman, directly connecting end users and beneficial owners, who previously had no insight into the prices the other party was accepting. The spread that would have gone to prime brokers is made available as a benefit to market participants.

Using common transactional data produced in this case, Professors Asquith and Pathak calculated the weighted average

spread in the market to be 41 basis points. Because the benefits of platform trading 41 basis point are significantly greater than the costs of operating a platform, Professor Zhu concludes that platform trading would have been viable in this market.

Now, in fact, Professors Asquith and Pathak also calculated the weighted average spreads by temperature. And viability is even more apparent in the case of hard-to-borrow securities, where the average benefits of platform trading are more than 20 times the estimated costs of running a platform. But even for less expensive, warm and general collateral loans, platform viability is straightforward.

And keep in mind, this analysis suggests that platform trading would have been viable for all market participants, but Professor Zhu's impact analysis assumes only a small percentage of the market shifts to using the platform.

Now, Dr. Zhu's cost comparison analysis is common evidence that the benefits of platform trading exceed the costs of running and maintaining a platform. As such, plaintiffs have common evidence that platform trading was viable, and no other inquiry into the costs of platform trading is necessary for purposes of proving impact.

Turning next to damages. Our experts opine that in the but-for world, there would have been some costs associated with platform trading. Specifically, they opine that in the

but-for world, there would be costs associated with using a clearing sponsor to access the CCP, and also fees paid directly to the platform itself. To estimate what these costs might have been, Professors Asquith and Pathak examined costs in other markets, reviewed relevant regulations, looked at the record evidence, reviewed academic literature that discusses this point and, as a result of this analysis and their own expertise, they concluded that a conservative estimate of the costs of platform trading for purposes of calculating the class's damages would be between four and 33 basis points for beneficial owners, and nine and 38 basis points for end users.

THE COURT: When we get to trial, does that number get refined somehow? That's a pretty big range.

MS. LEVENS: Yes.

THE COURT: What will we know by the time we get to trial that would make that number more precise?

MS. LEVENS: The reason that this is a range is not because it's an estimate, it's because it is based off of the transactional costs that AQS charged in the market, and those vary based on the temperature of the loan. So for any individual stock loan, we could calculate the exact costs using the data we have today and, in fact, that is how the experts' damages estimates are calculated.

THE COURT: So part of the formula will be an exact number --

MS. LEVENS: Yes. This just gives the end range as to give context. Together, this is what the combined costs would be.

THE COURT: Understood. Thank you.

MS. LEVENS: Now, in arriving at these cost estimates, Professors Asquith and Pathak incorporated a number of conservative assumptions. First, they do adopt the transactional platform fees charged by AQS. Even though the conspiracy prevented both AQS from achieving scale and rival platforms from entering the market, which would have driven down platform fees, but they don't include the volume discounts that's AQS actually provided during the conspiracy period. Their model accounts for sponsorship costs, even though similar markets have developed what are known as special CCP memberships. And, in fact, one such membership model was being considered in this market, and that would have entirely eliminated sponsorship costs for beneficial owners. They also adopt Professor Hendershott's estimate of the costs of contributing to the CCP default fund, even though Dr. Zhu estimates a lower amount.

Finally, because regulators regarded CCPs as less risky, they said to enact various regulations to incentivize a shift to the use of CCPs. Those incentives basically resulted in a lot of benefits to the prime brokers and were regarded as quite substantial. This would have allowed sponsors, including

the prime brokers, to provide sponsorship services at a lower price.

Now, the existence and magnitude of the these conservative assumptions is readily apparent when one compares the costs our experts are incorporating into their damages model with the fees charged by similar exchanges in competitive markets. This is not a situation in which plaintiffs have incorporated the absolute smallest cost possible in order to inappropriately inflate aggregate damages, as was the concern in the *Hickory Securities* case.

Importantly, though, even with all of those conservative assumptions, the conservative cost estimates that Professors Asquith and Pathak are using are entirely consistent with platform viability as you can see by comparing their cost estimates with the weighted average spreads in the over-the-counter market.

Now, the parties disagree as to what the best estimate of cost would be; and the magnitude of this disagreement is quite significant. Professor Hendershott, defendants' expert's estimates, are quite a bit larger than our expert's.

Without diving too deeply into the granularity of this, it is worthwhile to take a step back and take note of the things about which the experts do agree:

First, both plaintiffs and defendants take into account ways in which costs might be different for beneficial

owners and end users. In calculating sponsorship costs, the experts all considered the costs of regulatory capital, initial margin, and contributing to the default fund. We even used Professor Hendershott's estimate for default fund costs.

The experts all used the fees charged by AQS as a starting point for estimating the magnitude of platform fees, and the experts likewise all considered the likelihood and potential magnitude of fixed platform fees being charged in the but-for world. The experts are basically employing the same framework; they just arrive at different estimates.

But as the court in *Restasis* made clear, neither side will ever prove whether its predictions are correct. The but-for world is, by definition, hypothetical. To proceed as a class, plaintiffs must have a methodology that roughly reflects the harm to the class. And as explained by the court in *Lidoderm*, that the experts dispute what the appropriate input should be does not undermine the approach or reliability of an expert's damages model. And as my colleague Mr. Brockett noted, defendants don't really challenge the model itself.

Now, we should note — even though the Court don't need to decide this — we disagree with Professor Hendershott's estimates. If you compare the estimates just of platform fees that Professor Hendershott is advocating, with the platform fees charged in competitive markets, you'll see that he's advocating platform fees that would have been hundreds of times

larger than what's charged in bug shooting platforms. That's strains credulity.

Likewise, his analysis of the costs of regulatory capital, if they were correct, then prime brokers in the actual over-the-counter world would have been losing money on their general collateral and warm loans. But there is simply no evidence suggesting this is the case. These nonsensical results are caused by a number of serious flaws in his analysis.

As just one example, he fails to recognize an OCC rule which allows the use of securities to satisfy initial margin requirements. Now, Professor Hendershott testified that he didn't know this was allowed. Defendants' other expert, Mr. Pridmore, testified that he did know it was allowed; he just didn't include that fact in his report. But either way, this is a material omission.

As Professor Hendershott himself recognizes, beneficial owners have significant volumes of unlent securities. And since a lot of that is GC for which supply outstrips demand, there is no opportunity costs for beneficial owners using that GC to satisfy their initial margin requirements.

This is just one of many points of dispute between the parties about costs. We believe we have the better side of the argument, as I'm sure do defendants. But defendants'

insistence on resolving these disputes today is simply wrong as a matter of law.

To calculate damages in an antitrust case, plaintiffs have to try and predict what would have happened in a world untainted by defendants' conspiracy. This can never be done with precision, and precision is not what is required under the law. As Justice Scalia succinctly put it, the calculations need not be exact.

Defendants can present their arguments about what they believe the costs of platform trading would have been. And as in *Air Cargo*, the jury may consider these arguments as a basis for reducing or withholding any damage award. But at this stage, they do not affect the model status as acceptable common proof of aggregate damages.

We want to briefly touch on the FTAIA, which limits the extraterritorial application of the U.S. antitrust laws.

The FTAIA poses no bar to the class's antitrust claims here. This is a case about a domestic conspiracy to block the emergence of platform trading in the U.S. stock loan market. Those platforms would have facilitated the borrowing and lending of U.S.-listed securities. And the primary target of defendants' conspiracy was AQS, a U.S. platform.

Finally, the class is limited to ensure that it only encompasses the U.S. effects of the conspiracy. The FTAIA's domestic effects exception makes it clear that this case is

actionable under the U.S. antitrust laws; and plaintiffs can demonstrate that fact using common evidence, including our liability evidence, our expert analysis showing proximate cause between the conspiracy and the class's injury and, finally, the transactional data which ensures that only trades of U.S.-listed stocks with U.S.-based defendants are included.

Yes?

THE COURT: If there are any courts who have wrestled with this analysis, whether the FTAIA applies or not.

MS. LEVENS: There are several cases. *Empagran* makes it clear, quoting the house report, that foreign traders can have claims under the antitrust laws. The real question is about the connection to U.S. commerce. These are prices charged by U.S. defendants of U.S.-listed securities. There's really no question that this has a massive domestic effect on commerce, and it's clear under the law that that's all that's required.

Unless there are other questions, plaintiffs will reserve the remainder of our time for rebuttal.

THE COURT: Thank you.

How about we take a two-minute break so we can switch over, and then the defense can go and get started.

(Recess)

THE COURT: Introduce yourself again for the record, and then go right ahead.

MS. YABLON: Good afternoon, your Honor. I'm Staci Yablon of Winston & Strawn, counsel for the defendant Goldman Sachs. I will be joined today in argument by Robert Wick of Covington & Burling, counsel for the JP Morgan defendants; and Michael Paskin of Cravath, Swaine & Moore, counsel for the Morgan Stanley defendants.

Just to give your Honor a brief roadmap for defendants' argument this afternoon, I will begin with a brief introduction, followed by Mr. Wick, who will address adequacy, explaining why class representatives and class counsel cannot represent both the borrower and lender subclasses.

Then Mr. Paskin and Mr. Wick will address defendants' argument regarding predominance. After, I will explain why individual actions would be superior to a class action in this case. And finally, I will explain why the class period — in the event your Honor recommends certification of a class or subclass, which we don't think you should do — must be limited to plaintiffs' original class period, the only period for which any discovery exists in this case.

Defendants would like to reserve ten or 15 minutes for rebuttal. And for the most important question perhaps on people's minds now, would note that after Mr. Wick finishes adequacy, which should be in about 20 to 30 minutes, it might be an appropriate time for lunch.

THE COURT: Okay.

MS. YABLON: We have now listened for over two hours as plaintiffs have inaccurately described the stock lending market, the fundamental issue of this case. And more egregiously, plaintiffs have spent extensive time on the issue of liability that, one, is not relevant at all to a class certification hearing; and two, concerns issues that the record completely contradicts. In fact, let me be clear: Plaintiffs will not prevail on liability.

But we are not here today, your Honor, to discuss liability. We are here to discuss plaintiffs' motion for class certification and why it should be denied.

During our presentation today, you will hear an accurate depiction of the stock lending market, which is strongly supported by the record. Understanding the actual market is vital to evaluate plaintiffs' motion. It will quickly become obvious that there are many individualized inquiries required which necessitate denial.

Plaintiffs inaccurately describe stock lending and borrowing as being part of a single unified market which is dominated, according to them, by prime brokers who are mere middlemen, providing services which plaintiffs simultaneously downplay in importance, yet admit would have continued over the counter in the but-for world.

Plaintiffs also assume that the borrowing and lending market participants would have unrealistically similar

interests, goals, and needs. In reality, as the record makes very clear, stock lending and borrowing occur as part of a highly complex dual-sided market. Prime brokers provide a bridge within this market and, in so doing, they can provide their borrowing clients with a multitude of individualized services. And as you will hear from my colleagues this afternoon, the borrowing and lending market participants frequently have differing and, oftentimes, adverse interests.

A simple example. Say I want to buy a share of Coca-Cola. I go on an exchange and I purchase it. The transaction ends as soon as the sale is complete.

Stock lending and borrowing is completely different. It creates, in the words of AQS's former CEO, Pat Cestaro, a marriage between the borrower and lender. This marriage is a unique feature of the stock lending market and is what distinguishes this market from those the plaintiffs have already mentioned this morning and as Mr. Paskin will further address this afternoon.

And like in any marriage, it's safe to assume that both parties to the transaction want to know with whom they are entering into a relationship. The length of the stock lending relationship is typically undefined. It can be kept open for a few days, months, or even years. And like in any good marriage, borrowers and lenders oftentimes have differing and sometimes conflicting goals.

For example, borrowers of stock want their borrowers to be stable, meaning that the stock will not be recalled prematurely, while lenders need flexibility to recall their lent stock at will. This conflict makes sense when you think about the types of entities within this dual-sided market.

On the one hand, you have hedge funds which make up of the vast majority of borrowers, an ironic fact I would point out, as there are no hedge funds currently serving as named plaintiffs in this case, something we will discuss later this afternoon.

As your Honor is undoubtedly aware, a core feature of hedge funds' businesses is that of borrowing stock to support their shorting strategies. Because it is impossible to predict when a stock price will decline. Stock borrowers want to know that their shorted stock will now be recalled before their chosen strategy has a chance to perform.

On the other side of the market, lenders or beneficial owners, which are typically long-term holders of stock, like pension funds, require the flexibility to recall their lent stock at will. A beneficial owner might recall its stock to comply with regulatory restrictions or voting rights or simply to pursue its own investment strategy. Beneficial owners typically do not have any desire to deal directly with prime brokers acting on behalf of their borrowing clients or the borrowing clients themselves. Instead, they rely upon agent

lenders to manage their lending portfolio and act as intermediaries between them and the prime brokers.

These conflicting needs of borrowers on the one side of the market and lenders on the other side, give rise to the role of the prime brokers. In a stock lending transaction, prime brokers act as counterparties to both the lender or intermediary agent lender and the borrower. This allows prime brokers to provide lenders with the flexibility to recall their loan at will, while ensuring the stability of the loan for the borrower and its shorting strategy.

How do prime brokers do this? The primary way is through their unparalleled access to diverse sources of supply. Prime brokers have both internal sources, like stock they own or can access from positions held by other clients, and external sources, including from other beneficial owner relationships or agent lenders. And as you will hear later, prime brokers provide their borrowing clients with an array of other important services, many of which are essential to their clients' ability to borrow stock.

During our time here today, Mr. Wick, Mr. Paskin, and I will explain how this unique and complex dual-sided market structure requires thousands of individualized inquiries and compels denial of plaintiffs' motion.

THE COURT: Thank you.

MR. WICK: Your Honor, I'm Robert Wick. I represent

the JP Morgan defendants; and at the moment, I'm speaking on behalf of all defendants under Rule 23(a)(4) adequacy requirement.

There are three reasons why the representation that's proposed here is inadequate. The first is that there is a fundamental conflict of interest between lenders and borrowers; the second is that the two borrower-named plaintiffs, Torus and SCERA are inadequate to represent a subclass of borrowers; and the third is that the class includes members whose would have benefited from exactly the same conduct that the plaintiffs say harmed other class members.

Turning to the first of those three arguments, the conflict between lenders and borrowers. The plaintiffs are proposing to proceed here by way of unitary representation of lenders and borrowers. A single pair of law firms will jointly represent both lenders and borrowers; and a single group of five named plaintiffs acting as a unit, acting in unison, will jointly represent both lenders and borrowers, that's their proposal.

The trouble with that proposal is that lenders and borrowers have fundamental conflicts of interest that bar unitary representation under Second Circuit law. Lenders and borrowers always on opposite sides of the market, and that means that's they have diametrically opposed interests in proving up the prices at which they allegedly would have

transacted with each other on anonymous trading platforms.

Lenders have an interest in proving that those platform prices would have been as high as possible. That maximizes the injury and maximizes any recovery to lenders. Borrowers have exactly the opposite incentive; they have an incentive to maximize their own injury and maximize their own share of any recovery by minimizing any injury to lenders and minimizing any recovery to lenders.

THE COURT: How is it different from the variety of different stock exchange cases where you have purchasers and sellers? So why is this case different?

MR. WICK: Well, the cases that it's most similar to, your Honor, are *In Re ForEx* and *In Re LIBOR*. In both of those cases, you have a proposed class of exchange participants. And you had exchange participants who were often trading on opposite sides of the market from each other. And those two cases, two recent cases, *LIBOR* and *ForEx*, the court said the fact that you have exchange participants who are often opposing each other on the exchange market and who have opposing incentives with respect to proving up what the price on the exchange would have been in the absence of the challenged conduct, that, in both of those decisions, the court said was a fundamental conflict of interest that precluded class certification.

The conflict of interest here is even more stark, it's

even more fundamental. Because in *ForEx* and in *LIBOR*, it was only some of the time that class members were trading on opposite sides of each other on the exchange. Here we have a class that's cleaved right down the middle: its lenders on one side, its borrowers are on the other side. And they are always fundamentally opposed to each other; they always have an interest to maximize their own injury by minimizing the injury to the other half of the class. They can't both be represented by the same representatives and the same counsel.

THE COURT: Okay. So why not just appoint separate counsel for the two subclasses?

MR. WICK: In the first place, you would need the plaintiffs to come forward with a specific proposal of what they want to do. And they've had three successive chances to do that in their opening brief, in their reply brief, and in their sur-surreply brief. They haven't put any proposal in front of you, your Honor, for independent counsel that you can evaluate and determine whether it does or doesn't satisfy Rule 23 --

THE COURT: Well, because they don't agree with you that it needs to happen.

MR. WICK: Right. But they had 14 months to at least propose a contingency plan, and they haven't done it. So I can't evaluate the proposal until I see the specifics of it, and then we're entitled to put in a brief about whether it is

or isn't adequate.

The second part of the answer, your Honor, is that they would need brand-new named plaintiffs. These named plaintiffs are already compromised; they have already committed themselves to specific positions on the issues that divide lenders and borrowers. They cannot provide independent representation because they've already put a stake on the ground and said, This is how we are going to allocate the alleged injury; this is how we're going to allocate any recovery here. The stake in the ground that they've already put down is their damages model. Their damages model is their allocation of the alleged injury, and it is their allocation of any recovery.

And so lenders, they need their own independent representation. They need their own independent representative determining whether they agree with that allocation and whether it's fair to them. They don't have independent representation here. So we would need to have -- to evaluate any proposal along the lines that your Honor is suggesting, they would need to ask permission from Judge Failla to amend their complaint to add new class representatives, and they would need to ask permission from Judge Failla to reopen the discovery period. Because if they propose brand-new class representatives, obviously we would need an opportunity to take discovery from them and depose them. And so we don't have any specific

proposal from them in front of us, but it's far from clear whether Judge Failla would be willing to entertain an amended complaint and a reopening of discovery at this stage.

Beyond that, your Honor, there is a clear Second Circuit rule for dealing with situations where you have two distinct subclasses, and you have to allocate any recovery between them. And the rule is you simply cannot do that by means of unitary representation. Each subclass has to have its own independent class representatives; each subclass has to have its own independent counsel.

And the plaintiffs here have already done what Second Circuit law forbids: They have already, by way of unitary representation, put forward a model. It's a model of but-for world prices, the model of what the prices that would have been in a but-for world. That model allocates the alleged injury and allocates any recovery between lenders and borrowers, and it was put forward without independent representation of each subclass.

THE COURT: Right. I see you're referring to *Literary Works*, right?

MR. WICK: Yes.

THE COURT: Okay. So there, it was the end of the case. The whole case had been litigated by one set of named plaintiffs and one set of class counsel. The Second Circuit said at the very end, there needed to be separate

representation.

So I guess I don't understand why -- I don't understand why you need -- why we need to decide this issue now or why you say the Second Circuit upholds that rule, when even in that case, the case was litigated with those two supposedly competing interests the whole time.

MR. WICK: Well, in *ForEx* and in *LIBOR*, the courts both rejected class certification based on the same type of conflict of interest, albeit a less severe version of it than we have here.

In *Literary Works*, it's true that the first time anybody noticed a conflict of interest was when there was a proposal to approve a settlement. And so we know, at a minimum, from *Literary Works*, that these are not adequate counsel to negotiate a settlement with the defendants. They can't do it. And I would submit, your Honor, if they are not adequate counsel for purposes of representing the class in settlement, they can't do the same thing at trial that they're proposing to do at settlement.

They are proposing to show up at trial and introduce their damages model; introduce their allocation of the alleged injury and their allocation of the alleged recovery at trial. And that's a model that they came up with by way of unitary representation. So they are not adequate to represent the class at trial; they are not adequate to represent the class at

settlement. And if you can't represent the class at trial or settlement, you're not adequate to represent then at all.

If I may, your Honor, I'd like to walk you through three examples of exactly how the conflict of interest plays out here. I'm now looking at slide three, which is example 1, a conflict over allocation factors.

So the plaintiffs' model has some factors built into it that they call W factors. And those W factors are literally a dial; they are a control dial. And you spin the dial to the left, you allocate more injury and more recovery to the borrower class; you spin it to the right, and you do exactly the opposite.

And the plaintiffs have already picked specific settings for their dial. The setting that they picked for all warm stock is 25 percent. What does it mean that they've selected an allocation factor of 25 percent for warm stock? This is what it means: It means that to the extent that they succeed in proving up any price savings in the but-for world, to the extent they prove that there would have been any price savings on a warm stock, they give 25 percent of the savings to lenders, they give the other 75 percent to borrowers. So lenders and borrowers are locked in a zero sum game. And with respect to hot stock, their W factor is 35 percent. Any price savings they can prove up they'll distribute at 35 percent to lenders and 65 percent to borrowers.

The two diagrams here on slide three tell you how this works in practice. So on the left-hand side of the diagram you see a label, ten basis points average actual lending price. On the right-hand side of the diagram, you see 20 basis points average actual borrowing price. So in this example, we're assuming that there is a specific stock loan; and that class members are lending that stock to prime brokers at an average price of ten basis points, and they are borrowing it from prime brokers at an average price of 20 basis points.

The difference between that — or what they call the spread — is ten basis points. And so what the W factor does is they take that W factor of 35 percent in this example, they multiply it by the ten basis points spread, and they come up with 3.5 basis points. They add that 3.5 basis points to the average lending price, and they come up with 13.5 basis points. And they say that is the price at which this stock loan would have occurred on a platform in the but-for world.

The effect of that, the practical effect of that, is that they are allocating the blue portion of the alleged price savings in the but-for world to lenders, and the gray portion to borrowers.

Now, what happens if you take that injury dial, that W factor, and you spin it to the right, and you increase your W from 35 percent to 70 percent? And by the way, 70 percent is not a randomly chosen example. Professor McCrary demonstrated

in his report that for many of the very, very hot stocks, there's a very good economic argument that could be made that if you're going to choose a W factor, it ought to be more like 70 percent than 35 percent.

I should also mention, they continually refer to — in a disparaging way — that Professor McCrary is a law professor. Professor McCrary got his Ph.D. in economics. He taught economics. He was offered a great position as the professor of law and economics at the Columbia Law School. He is widely published on econometrics and regression analysis. That's his field of expertise, as well as antitrust economics.

(Continued on next page)

MR. WICK: In any event, if you spin the injury dial to the right from 35 percent to 70 percent, the effect of that is you roughly double the amount of the alleged price savings that goes to lenders, and you roughly cut in half the amount of the alleged price savings that goes to borrowers.

Now, two further things, your Honor. Where you set your W setting, it can make the difference between whether you get something and whether you can get nothing at all. That is for two reasons. The first is platform transaction fees. So this diagram ignores platform transaction fees. For the sake of simplicity, let's suppose you're a lender and that you lent ten basis points in the actual world and but-for world you would go to a platform and lend at 13.5 basis points.

Now, if your transaction fees for using the platform are three and a half basis points, you get nothing. The plaintiffs give you nothing in that situation. And so unless, as a lender, you have the freedom and the independence to argue for a W factor that is higher than 35 percent, you're going to get nothing at all under their unitary allocation of who gets what.

The second reason is not everybody lends or borrows at the average. There is a huge amount of price dispersion in this market. So if I was a particularly skillful lender and I was able to lend out my stock at 13.5 basis points in the actual world, then the plaintiffs unitary allocation gives me

nothing. I've got 13.5 basis points in the actual world, that's all I am going to get in the but-for world.

So what exacerbates the conflict of interest here, as we see on slide four, is this very reasonable economic could be made for higher W factors, for lower W factors, or for varying W factors. In fact, the better economic view is that you wouldn't have exactly a 35 percent W factor for every single hot stock on every single day of a six-year class period. There are degrees of how hot a stock can be. It could be slightly hot or it can be supernova hot. And the plaintiffs ignore all that. And so what we're missing, your Honor, is we're missing independent representations of who can stick up for borrowers and determine whether the W factors are fair to them or who can stick up for lenders and determine whether the W factors are fair to them.

A second example relates to who bears platform fees. So the plaintiffs' expert say there are two different ways you could think about who pays --

Well, let me just back up a step. Somebody has to pay the anonymous trading platform. And the two candidates to pay the platform are lenders and borrowers. The plaintiffs say there are two different ways you can think about splitting up platform transaction fees between lenders and borrowers.

The first way is you can think that the platform would charge equal fees, symmetric fees, 50/50 to lenders and

borrowers. And that is what AQS did in the actual word. They split 50/50 between lenders and borrowers.

The second way you could think about this, and according to the plaintiffs' experts is, they both say, in the long run, platforms would probably reallocate all the fees from lenders to borrowers and have borrowers pay all of the fees. They say that is economically efficient because, in their view, most of the benefits of the platform trading accrue to borrowers and not to lenders.

And where the two experts -- Dr. Asquith and Dr. Pathek, the two plaintiffs' own experts -- parted company was whether that shift from symmetric fees to fees allocated entirely to borrowers would or would not happen during the class period. They both said it would happen in the long run. One of them testified at deposition the long run included the class period, the other one said that the long run was out further past the class period. Those are the cites shown in the fine print there.

Why does this matter? Is this just some technical bickering over a couple of basis points? It matters a lot, your Honor. It single-handedly determines whether hundreds of lenders or hundreds of borrowers at a minimum are going to have any chance of recovering anything at all. When you run their model exactly the way they designed it in two different iterations -- iteration number one, split the transaction fees

equally between lenders and borrowers; iteration number two, shift the fees all to borrowers -- that single-handedly determines whether over 600 accounts -- over 300 lender accounts, over 300 borrowers accounts -- suffer any alleged injury at all.

So under a unitary representation scheme, the plaintiffs are going to have to tell hundreds of borrowers or hundreds of lenders, we want you to please lay down your lives for the good of the opposite subclass. That is not adequate representation.

THE COURT: I obviously read Judge Failla's decision on the motion to dismiss. I don't remember. Did the defendants argue that only the borrowers should be plaintiffs or only the lenders should be plaintiffs, or was it just straight across the board there was no failure to state a claim?

MR. WICK: There was no proposal to certify a class at that point.

THE COURT: I know.

But in terms of who has this claim, is it the lenders or the borrowers?

Did the defendants make a choice?

MR. WICK: I don't understand the question. We did not raise a conflict of interest at the motion to dismiss stage, your Honor.

THE COURT: OK.

MR. WICK: So a third and final example has to do with conflict of interest over search costs. Search costs provide an additional illustration of how, by virtue of the fact that they sit on opposite sides of the market, lenders and borrowers very often have opposite interests in issues in the litigation.

What is the plaintiff's search cost argument? At a high level, it proceeds in two steps. Step number one, search costs, they say, cause a market participant to accept worse prices than they would if it didn't cost them something to keep searching for other price alternatives. Two, they say that a platform will come along and lower those search costs and thereby will enable a market participant to get a better price.

Well, the trouble with that defendants' argument if you're a lender is that prime brokers are the ones who bear search costs when they are dealing with lenders. You don't have to take my word for that, your Honor. The plaintiffs' experts say it in their joint expert report. They say the over-the-counter search costs associated with locating hard-to-borrow shares largely arise because the broker dealer -- that is the prime broker, not the class member -- may sometimes have to contact many potential suppliers of shares.

Prime brokers are the ones bearing search costs.

THE COURT: Did they pass that on to the lenders?

I mean, you don't do that out of the goodness of your

heart, right?

MR. WICK: Well, what Mr. Olson says is what that means, if when I go to a lender and say will you lend this stock to me at 100 basis points, maybe the competitive price would really be 90 basis points. I'll accept a higher price. I'll pay the lender 100 basis points rather than pay the cost of continuing to search and go ask a different supplier what its costs are. Search costs run in reverse when you're talking about a prime broker searching out a supply of hard-to-borrow stock from a lender.

THE COURT: But my question is, in that situation, would the prime broker pass the cost on to the lender, pass the higher cost?

MR. WICK: Well, the plaintiffs would probably argue that if the prime broker pays the higher price, it probably passes the cost to that higher price on to the borrowers. But the point is, your Honor, when you take away the search costs, lenders now can't get as good a price.

According to the theory of their search cost model, the prime broker knows it will have to pay a search cost in order to keep searching. So it pays the lender a higher price. You take that search cost friction away, now the prime broker pays a lower price to the lender under the theory of their search cost model, which means that the defendants' argument they are advancing to try to help borrowers is hurting the

lenders. The more they reduce the search costs under the theory of their search cost analysis, the more they hurt borrowers.

And their own sources agree with me on this, your Honor. As we see on slide seven, they cite predominantly the Kolasinski, Reed and Ringgenberg study in their joint -- in the plaintiffs' joint expert reports. And those authors conclude lenders' benefit, i.e. the beneficial subclass owner benefits, sometimes significantly from search costs. And they conclude that their results, the results of their study, provides new evidence that search costs give equity lenders -- that is the beneficial owners lending their stock -- the ability to charge higher prices.

The plaintiffs quoted the SEC's notice of proposed making earlier today. Well, that same document agrees with what I'm saying. There, the SEC recognizes in the first part of the quote obtaining a securities loan often involves an extensive search for counterparties by broker dealers. It's the prime brokers that are bearing the search costs. Then the SEC goes on to conclude that bringing more price transparency to the market and reducing search costs may well hurt beneficial owners. They could experience reduced revenues from their lending activities. Direct conflict of interest in this question between lenders and borrowers.

What is the case law say about this? Well, there are

three Second Circuit decisions -- Literary Works, Payment Card, Central States -- all say there is a flat-out prohibition, you cannot use unitary representation where you are in a position of having to allocate a recovery between two distinct subclasses.

Similarly, the Forex litigation and LIBOR litigation that we just spoke about a minute ago, both of those courts faced situations similar to this one. The exchange class, the class of exchange participants were sometimes on opposite sides of the market. That was deemed to quote in re Forex to create fundamental conflicts of interest that precludes class certification. That was not a settlement context, your Honor. That was a litigation context. It precluded class certification. Same thing in LIBOR.

We have a more intense and severe conflict here because here there is a more stark division between the two halves of the class. Lenders are always, almost always, on one side of the market. Borrowers are almost always on the opposite side.

Plaintiffs and their counsel cannot give, cannot represent either one of the subclasses. They can't split themselves in half and represent one or the other. That is for two reasons. Under Second Circuit law, they owe a duty of undivided loyalty to each subclass that they want to represent. Well, they already have a group of five named plaintiffs that

are functioning as a unit. That named plaintiff group includes lenders.

So if the plaintiffs have already committed themselves to represent lenders, they cannot give undivided loyalty to a class of borrowers. The same is true in reverse, your Honor. The named plaintiff group includes borrowers. That prohibits them from giving among the named plaintiffs. That prohibits them from giving undivided loyalty to the other side of the case.

Finally, your Honor, as I mentioned before, they have already committed themselves to positions that harm both subclasses. They are already committed on the question of how do you allocate any recovery here, they are already committed on what but-for prices are, and they have already committed themselves to positions on platform fees and search costs. They cannot do what an independent counsel that hadn't spoken on this question before could do, and that is figure out what set of positions best advance the interests of borrowers alone or of lenders alone.

The second adequacy problem here, your Honor --

Actually, let me address a couple other things that Mr. Brockett said before I move on. He cited the NASDAQ case and said that the NASDAQ case permitted a similar conflict of interest. There are three distinctions between this case and the NASDAQ case.

In the first place, that case was decided solely on the pleadings. Judge Sweet said, on page 503, I have to decide class certification at an early stage, assuming the truth of the pleadings. I won't look behind the pleading. That is not the law anymore. Here, we have a robust evidentiary record which takes us far beyond the record Judge Sweet had in NASDAQ.

Secondly, because in NASDAQ, Judge Sweet was focused only on the four corners of the complaint, only what was in the pleadings, he didn't know how the conflict might or might not play out as the case developed. He characterized the conflict or the potential conflict there as hypothetical and uncertain. He thought at that time there was a chance it wouldn't actually materialize.

THE COURT: But this kind of gets back to my point about the motion to dismiss. It's clear from the face of the complaint we're talking about the stock loan market, and we're talking about named plaintiffs who are borrowers and named plaintiffs who are lenders. So if this conflict is so fundamental to the very unique stock loan market, why weren't you screaming at the motion to dismiss stage to say there is no way that we could ever have these two groups of plaintiffs together?

MR. WICK: We didn't know. I mean, first, it's not our obligation to look ahead to class certification and tell the plaintiffs how to organize themselves at the motion to

dismiss stage. That is not our obligation. It is their obligation to understand and identify the conflict of interest and to propose some way of solving it. We didn't know whether they would do that, whether they would correct course by the time of class certification or not.

THE COURT: But what your point seems to be is that this case can't be proven with these two groups of plaintiffs together. That's why I'm not understanding why. I think it is your issue.

MR. WICK: We are not arguing that they can't represent the five named plaintiffs. At the motion to dismiss stage, the only parties before the court are five named plaintiffs. We have no objection to them -- nobody has any objection to them representing the five named plaintiffs.

Now, the five named plaintiffs on an individualized one-by-one basis, they can give their expressed written consent to the conflict of interest. Absent class members cannot do that, and the law is clear, you cannot rely on a right to opt out of a Rule 23(b)(3) class action in order to overcome a fundamental conflict of interest. There is no dispute about that. There is no debate about that.

Page 45 of our brief, opening brief, ECF 431, we cite authority on that. In <u>Literary Works</u>, you had a Rule 23(b)(3) opt-out class, in <u>Forex</u>, in <u>LIBOR</u>, in <u>Payment Card</u>, in <u>Central States</u>. All of those were Rule 23(b) -- well, one of them was

23(b)(2). All the rest of them were Rule 23(b)(3). And what they say is we have known since the Supreme Court's decision in <u>Amchem</u> that their right to opt out of a Rule 23(b)(3) class action does not mitigate or excuse the existence after fundamental conflict of interest.

So two other things about the <u>NASDAQ</u> case, your Honor. Judge Sweet said the conflict was hypothetical and uncertain there. That was a pre <u>Dukes v. Wal-Mart</u>, pre <u>In re IPO</u> decision based solely on the pleading. Here, we now understand you have to decide class certification based an evidentiary record, and the evidentiary record makes inescapably clear there is a fundamental and unavoidable conflict of interest. That already exists. It exists because they have taken a position on allocation of any recovery in the form of their model of but-for prices.

Third, and finally, your Honor, the <u>NASDAQ</u> case relied on an incorrect legal standard that has been subsequently rejected by appellate authority. The <u>NASDAQ</u> case said, much like Mr. Brockett, there is a collective interest in maximizing the overall recovery for the class as a whole. There is a collective interest in establishing liability.

Well, what the Second Circuit later said in <u>Literary Works</u> is, it doesn't matter that there is some common interest between the class. It doesn't matter that they all have a common interest in maximizing the recovery to the overall class

as a whole. That doesn't excuse the existence of a fundamental conflict of interest between two subclasses. You still need independent representation.

One last thing. Mr. Brockett said, he also cited The Auction House case. If you read that decision, your Honor, it's a complete nothing. Nobody there pointed out or thought or believed that is there really was any conflict of interest in auction house. No one raised it, and it is far from clear from the face of the decision that any conflict would exist because there, buyers and sellers each paid their own separate and independent commission to the auction houses.

Finally, Mr. Brockett said the defendants have no interest in the allocation of a recovery. Well, I don't want to jump ahead to the question of predominance. I won't get into the nitty-gritty of that, your Honor. But he's exactly right. The defendants don't have the incentive or the interest to look out for lenders. It's not our job to look out for lenders or be their representatives. It's not our job to look out for borrowers and be their representatives. We represent the defendants. They need their own independent counsel because it's not the defendants' job to stick up for either one of them.

THE COURT: OK. But the motion for class certification was publicly filed, right?

MR. WICK: Yes.

THE COURT: If there were any lenders or borrowers out there who opposed a class being certified, they could have sought to intervene and state a position on the motion. And I don't think we have seen that, right?

MR. WICK: Look, I've never heard anyone say that the fact that a class member didn't go to the trouble to read the docket and intervene and object in advance to certification of a class excuses a fundamental conflict of interest.

THE COURT: I'm not saying it excuses it. I'm just saying, we already know that there are 22 firms who are watching this case like a hawk because they don't want their data being revealed to the world.

So there are examples. I forget which case it is now, there is an example of one of the class certification decisions that the parties have shown me where there was an intervenor who filed a brief in connection with class certification.

So it's not unheard of, if there are issues that people who are not part of -- you know, not the named plaintiffs or not the firms who are already litigating the case, there's no reason they can't come forward.

MR. WICK: Maybe they are assuming, like the defendants are, assuming that this is obviously wrong and they don't have to intervene because obviously a class won't be certified.

This defendants' argument is a weaker version, your

Honor, of the defendants' argument that an opt-out right cures a fundamental conflict, right. After you get actual notice of the class action, if your right to opt out at that point doesn't cure the conflict of interest, then certainly putting an affirmative obligation on the class members to scour the docket and anticipate before class certification that a class might be certified, and the court won't correct the error, that would be putting a very heavy obligation on the class members.

THE COURT: Well, the other defendants' argument is that we have the named plaintiffs, including lenders and include borrowers, so they don't seem to think there is a conflict, right?

MR. WICK: They are entitled to consent on an individual basis, give expressed written consent to the conflict of interest on their own.

THE COURT: You're assuming there is a conflict. What I'm saying is this could signify the inference you could draw from that there is no conflict.

MR. WICK: Correct. I think those names plaintiffs, maybe they don't believe there is a conflict. Under the precedent we have cited, it seems clear and we think the record proves there is one.

THE COURT: OK.

MR. WICK: It may be that they have decided that the conflict of interest is worth it and they are willing to

consent to it, and they are entitled to do that if they give their expressed written consent to it. But silence is not consent. Failing to return an opt-out form is not consent. The case law on that is clear. We cited, give or take, page 44 or 45 of our brief.

Turning to the second adequacy problem, your Honor, neither Scera nor Torus is adequate to represent a proposed borrowers class. For Scera, it's the same defendants' argument I have already made. If I'm right that there is a fundamental conflict of interest between the two classes, then Scera cannot represent either one of them because it's got a foot in both camps. It's both a lender and a borrower.

In re Payment Card, the Second Circuit said, named plaintiffs with claims in multiple sub groups cannot adequately represent the interests of any one sub group. There is a clear Second Circuit rule on that.

What about Torus? Well, Mr. Brockett just defined Torus out of the class. Earlier today he said for the very first time something that he has never said in writing. They have never before said that because UBS wealth management customers were not customers of the prime brokerage business, they are out of the class.

But if that is the new definition of the class that he's going to adopt on the fly at an oral defendants' argument, he has defined Torus out of the class. Torus was not a

customer of the prime brokerage business of either Goldman Sachs or Bank of America Lynch. It was a customer of a separate line of business that provided barebones clearing and trading services without the range of prime brokerage services that customers that deal with the prime brokerage units at Goldman Sachs and Bank of America Lynch get. So Torus is no longer in the class, and they can't be a class representative for that reason.

Beyond that, your Honor, Torus is a tiny proprietary trading firm. It is not a hedge fund. It had total assets under management during the class period between $100,000 and $10 million. Even at the upper end of that, even under $10 million, it's far smaller than the vast majority of the hedge funds that make up the vast majority of the class. It is much too small to be a viable platform participant.

Torus is total shorting fees. I'm not talking about its alleged injury. I'm not talking about its alleged damage or its alleged recovery. It's total shorting fees. The total fees it paid to its prime brokers every year were smaller than what Dr. Asquith, the plaintiff's expert, said any short seller would have. At his deposition, he adamantly denied that there would be any short seller with total shorting fees of less than $10,000 a year. Well, Torus is one.

Dr. Asquith further agreed at his deposition that if the thing he didn't believe exists actually did exist, then it

would not be a typical short seller, i.e., if there really were a short seller as small as Torus, he said that would not be "your typical short seller." That is the deposition cites on the right-hand side of the page there.

Finally, Torus had no understanding at all of the hedge funds that make up the vast majority of the proposed borrowers class. You see a quote here from Mr. Simeone, a Torus trader, I don't know what a hedge fund does... I never dealt with a hedge fund. I don't know what they have or what they do, to be honest with you. I never came across one.

THE COURT: He's a trader, though?

MR. WICK: He's a trader for Torus. So he's the guy that's actually doing the shorting for Torus.

So why does it matter that Torus doesn't have a good understanding of hedge funds? We saw why it matters earlier in this litigation, when the plaintiffs and their counsel did something that so antagonized a group of 22 hedge funds that they ended up hiring Davis Polk to represent them against plaintiffs and their counsel. The plaintiffs demanded individualized daily position trading data from all the hedge funds, not understanding that hedge funds guard their daily position data like the crown jewels.

The 22 hedge funds with total assets under management about $22 trillion reached out to plaintiff's counsel, asked them to compromise, asked them to back off. The two sides

couldn't agree, and so they were so frustrated. They hired Davis Polk, and they had Davis Polk write to Judge Failla that the plaintiffs' discovery requests demonstrated "the clear divergence between the interests of plaintiffs' counsel and the interests of many purported class members."

THE COURT: But that's not the lender-borrower conflict that you're talking about. That's a different one?

MR. WICK: Correct. That is an inadequacy, right. Argument number one, lender-borrower conflict. Argument number two, Torus and Scera are inadequate to represent borrowers. One reason for that is neither Scera nor Torus is in touch enough with the interest of hedge funds that they derailed a conflict that forced 22 hedge funds to hire Davis Polk and complaint to Judge Failla about the clear divergence of interest between them. If Torus and Scera were adequate class representatives, if they were adequately representing the interests of the hedge funds that make up the vast majority of the class, we never would have come to the point where 22 hedge funds, with assets of under management of $7 trillion had to hire their own law firm to stick up for their interests against those of class counsel.

THE COURT: Right.

But those 22 people, again, just the point that I was making before, they didn't come in on class cert and say no, you should appoint one of us. No, Davis Polk is really the

counsel we should be appointed for the class.

MR. WICK: Seven of them did something extraordinary. Before they had any obligation to opt out, they preemptively opted out. I've never seen that happen before, your Honor. They didn't have any obligation to look at ahead at what might or might not happen at class certification. There was no class certification motion pending at the time.

THE COURT: Right. So they didn't want to have to turn over their data even on a confidential basis. That makes a lot of sense for the point that you were just making. They guard their data like the crown jewels, and if they don't have confidence in the court's confidentiality orders, they made that risk assessment that, you know, they were better off not participating, not potentially being part of what might be certifying of the class action than to provide their data.

MR. WICK: Well, Mr. Brockett renewed that conflict in his remarks earlier this morning. He said that we will have specific identifying data on class members by the time of trial. Well, that is the very issue that prompted a rebellion by the 22 members of the hedge funds. They reached a compromise with those two hedge funds because they agreed that the data would remain anonymous and that it would not run up to the present. It would be relatively old and dated data.

Mr. Brockett made clear earlier today he is not willing to live with the compromise by which he struck peace

with the 15 hedge funds that didn't preemptively opt out. He now wants to get the de-anonymized data by the time of trial, and he now wants to get all of the recent data that they refused to give him.

THE COURT: Right. That's been disclosed, and so if there is a notice to the class, that can be part of the notice. And if people on that basis want to opt out of the class, they can, right.

MR. WICK: Right. To opt out under clear law doesn't solve a fundamental conflict of interest. That is --

THE COURT: You're conflating the conflict of interest. I'm talking about if people don't want their data to be revealed, then they can opt out. That's different than the lender-borrower conflict.

MR. WICK: You're right. Your Honor, it is true that if you opt out, you may not have to produce your data.

THE COURT: Right.

MR. WICK: The point, though, is that this is an illustration of how Torus and Scera are not in touch with the interests of their class members and are not adequately representing them. They wouldn't have to go out and get their own counsel if that were the case.

THE COURT: I understand your point.

MR. WICK: The third and final adequacy problem, your Honor, is that the class includes class members that would have

benefited from the alleged conduct.

The fundamental claim here is plaintiffs say that spreads were too wide. The spreads between lending pricing and borrowing pricing were too wide and that hurt some class members. The proposed class here precludes many class members that benefit from wide spreads. The class here includes CitiBank, it includes Deutsche Bank, it includes BNP Paribas. All of them are large prime brokerages, often in the position of receiving the spread, not paying it. The class includes State Street Customer and others, who have a program under which they bypass prime brokers and lend directly the other side of the market. So they are in the position of receiving the spread, not paying it.

There was a very similar conflict of interest in Forex, your Honor. In Forex, again, the claim was spread inflation. The claim was that the spread in the FX market was too wide and that was hurting class members. But there were members of that class that were repeating the spread. And the court found that that was a fundamental conflict of interest that barred class certification. Exactly the same conflict of interest exists here, your Honor.

With that, unless the court has further questions, I'm ready to yield the podium, or go to lunch.

THE COURT: I think, yes, now makes sense to take a lunch break.

Is 45 minutes enough time for both sides, do you think? We can come back at, say, 2:15?

Great. All right. Thank you.

(Luncheon recess)

AFTERNOON SESSION

2:15 p.m.

THE COURT: Mr. Paskin, right.

MR. PASKIN: Yes, your Honor. Good afternoon.

THE COURT: You're going to lead with predominance?

MR. PASKIN: I will.

THE COURT: Let me just make sure we have the phone line on and we're ready to go. The court reporter is ready.

MR. PASKIN: Whenever you're ready.

THE COURT: Fire away.

MR. PASKIN: Thank you, your Honor.

Good afternoon. Michael Paskin from Cravath on behalf of Morgan Stanley.

Before we talk about predominance, I just want to spend about two seconds revisiting one of the questions you asked in the morning about why the defendants didn't raise this issue at the motion to dismiss stage.

THE COURT: Yes.

MR. PASKIN: Obviously, and sort of as was the case in the NASDAQ litigation, at the motion to dismiss stage, yes, in our briefing we talked about the complexities of stock lending market and how the dynamics were very different on both sides of the market. There, of course, was a theoretical potential for conflict at that point. But there was no sort of actual realized conflict because we didn't know how the plaintiffs

would or wouldn't propose to deal with it.

I could certainly hypothesize -- though, I guess it is not really for the defendants to hypothesize -- there might be ways in which they could have approached a class certification motion that appreciated the complexities and nuances and different dynamics on the two sides of this market and maybe created two totally separate standalone models to deal with that. I don't know. That might have been one way they could have at least resolved the conflicts that we raised about having this unitary model to measure and then allocate harm.

So, at the motion to dismiss stage, I don't think there was sort of already -- one, it was sort of not a problem that had presented itself yet. And I also just don't think that in articulating the defendants' arguments to dismiss the complaint, certainly under the legal standards where the conflict can't merely be hypothetical, I don't think there was -- it just wouldn't make sense for the defendants at that time to have raised it.

THE COURT: OK.

MR. PASKIN: Thank you, your Honor.

THE COURT: Yes.

MR. PASKIN: Let me turn to predominance.

So it is pretty much an undisputed proposition that class certification in antitrust cases rises or falls very commonly on whether plaintiffs can prove classwide injury

through common evidence.

Without quoting too many cases, that's what the recent Rail Freight case in the DC circuit says. And in the Second Circuit, one case, the Cordas case -- which actually is a case that the plaintiffs cite in their opening brief -- they describe it as whether injury in fact can be proved by common evidence, which is a pretty good very brief synopsis of it.

So in antitrust cases, how is this done? Almost universally. It's by looking and comparing actual prices paid by a plaintiff or class members in the real world to some prediction of but-for world prices. That is the comparison. That is the basic comparison that is done in every case. While the comparison is obviously also relevant to the calculation of the amount of damages, there is no legitimate debate that it is also fundamentally relevant to the issue of injury.

In the Cordas case, 502 F.3d at 107, the Second Circuit said, The extent of the difference between the but-for fee and the actual fee paid is relevant to the question of damages, but it is from a comparison between the two that the court would be asked to decide the question of injury in fact. So it is a pretty basic proposition.

The cases that Mr. Olson cited -- Air Cargo and Restasis -- Air Cargo in particular, that is the approach that they used in that case to evaluate injury. It was looking at a model of taking real-world prices and comparing it to some

model of but-for world prices. So remarkably that fundamental comparison is not what the plaintiffs propose here to evaluate classwide injury and whether there is evidence to put forth purported common evidence of classwide injury.

If you look at their slides, slides 19 and 21 from their deck, they go through all of the different elements that Professor Zhu used and some of the checks on that and whatever. They talk about their different components of classwide injury. None of those things talk about what we're going to compare real prices that were actually paid by class members to an actual model of but-for pricing. They have all of these different approaches, and we're going to get into those. But they don't do the most fundamental comparison in assessing injury.

The truly remarkable thing about it is that they have experts who do, do that. Drs. Asquith and Pathak, they do it. They say they took the actual pricing data for their damages model, for their but-for pricing model, they took the actual prices that were paid in the real world, and they compared them to their prediction based on their modeling of but-for prices in the but-for world.

So, but the plaintiffs, they keep saying, Don't look at that. Don't use that model. That is our damages evidence. That is going to come at a later time. That is not our injury evidence. But no matter how much plaintiffs say to us, you

know, don't look behind that curtain, we're going to look behind the curtain, and the court should look behind the curtain, and the court is obligated to look behind the curtain. Because regardless of how plaintiffs propose to set the terms of the playing field for how to evaluate this question, the defendants are also entitled to put forward evidence. There is no question about that.

It's not just whether plaintiffs' evidence and our critiques of it standing alone carries the day -- and I submit that it didn't -- but it is also whether all of the evidence put in by both sides on the question of injury carries the reasonable, the preponderance standard required.

So one thing that the defendants are certainly going to put forward in rebutting the plaintiffs' injury evidence from Professor Zhu is the Asquith and Pathak damages model. Because the damages model itself, when you just plug in the numbers as would be done in any antitrust case, predicts large numbers of uninjured class members. And when a model predicts large numbers of uninjured class members, that's fatal. That means no class gets certified. That is very clear from the Aluminum case and others.

So, Mr. Wick is going to come back a little bit later and talk about our critiques of the Asquith and Pathak model and why the actual number of uninjured class members is much greater and all of that. But the bottom line is, under

anyone's analysis, Asquith and Pathak predict uninjured class members, and the plaintiffs are saying, Don't look at that. Don't look at that. Look at this other stuff that we have presented that doesn't even address the fundamental question of how do you look -- what's the difference between what is paid in the real world and what is paid in the but-for world.

Before I get into your discussion of what is wrong with Dr. Zhu's model, there is sort of a threshold issue, and the threshold issue is what are the products that we're looking at here. And as the slide here states, over-the-counter loans offered by prime brokers in the real world and anonymous platform loans that were offered by the likes of AQS, or that they hypothesize would be offered in the but-for world, are fundamentally different.

And implicit in any pricing comparison, the kind of pricing comparison that goes on in every antitrust case is understanding that the products for which you're comparing prices are the same in the real world and the but-for world, that the value received by customers is the same. Because if the value received and the products are different, well, then comparing prices doesn't make any sense because you're comparing prices for two different things.

I thought Mr. Olson's Kayak example and for comparing airfares was an interesting one, because the better analogy here is that, in the real world, what prime brokers offer is

sort of a luxury extensive travel service. You want to take a five-star European vacation and you want that to include your first class airline tickets and your hotels and shuttling back and forth, and access to museums and dinner reservations and all of those things. And your travel agent quotes you some price for it, which may be high. And you can't then say, well, on Kayak, there is an option here, and it says book your flight or book your flight plus your hotel or your flight plus your hotel plus your rent car, and if I click on that button, well it's the same as what my travel agent is going to give me. It's not.

THE COURT: I don't know about Kayak, but Expedia now let's you do that. They have caught on. So the platforms catch on to the bundling, and it can happen.

MR. PASKIN: It can happen. I think what I'm saying, your Honor, is it still isn't the same. It still isn't the same because, you know, maybe your travel agent is going to give you the same flight, the same hotel, the same rental car. But what about all of the other stuff? What about the dinner reservations that you couldn't otherwise get? What about the private driver that is going to take you wherever and get you access to whatever special thing?

There are all sorts of ways in which the loans and the services that are offered by prime brokers in the real world, in this stock loan market, are bespoke. So without figuring

out those differences and accounting for those differences, you can't make a pricing comparison saying, well, what prime brokers offer is no different than what you can buy on Kayak.

So the slide here goes through several categories of that. The one that we're going to spend the most time talking about is sort of the first two. This loan stability point. Mr. Olson spent the most time on that, recall and rerate protection.

So the importance of this is paramount, because let's just talk about, like, why loan stability matters to hedge funds, to borrowers. When you short stock the loan, the stock lending is really just sort of an ancillary service. Hedge funds aren't in the business of borrowing stock. That is not what they are trying to do. That is not what their investment objective is. Their investment objective is we want to short stock, because we predicted the price of some stock is going to fall because of some news or whatever. It is overvalued. They have to borrow stock in order to do that because that is the way the market works. Those are the regulatory requirements, etc.

They have no idea when the price is going to fall of the underlying stock. If they did, then, you know, or if any of us did, we would all be geniuses and we would all be Warren Buffet because we could just, you know, make these bets and collect on them, and we wouldn't have to worry about any of the

risk involved in investing. The hedge funds, they don't know.

They say, well, gee, we think Tesla -- they gave Tesla as an example -- we think Tesla is a high flyer. We think it is overvalue. We think that, you know, people are going to come to realize that they are going to announce bad news, something is going to happen to cause the price to drop. They short stock to do that. And in order to do that, they obviously have to borrow stock. They don't know if that news is going to come out today, tomorrow, next week, next month, or next year, but they need to maintain that borrow to maintain their actual investment thesis, which is shorting Tesla. Their investment theory is not borrowing stock.

So Tesla is a particularly good example because if you had a hedge fund who just this week was shorting Tesla because they thought that Tesla would hit a bump in the road and they would profit from that short, and on Monday they were recalled, guess what happened on Tuesday? On Tuesday, after Elon Musk's announcement he was buying Twitter, Tesla's stock goes down 10 percent. So the hedge fund that was banking on some sort of news, not knowing what it was or when it would be coming, but they are looking for Tesla to drop, the hedge fund that got recalled on Monday, they don't get to profit from their shorting investment on Tuesday.

So that is the stakes here, and that is what really matters to them.

THE COURT: Right. I think the point that -- I'm sure Mr. Olson will respond to this when he gets back up. The point he was making is that the prime broker really seemed to be emphasizing that. Yet there is not a whole lot of evidence about how that it's not in the prime brokerage agreements.

I mean, correct me if I'm wrong, I haven't looked. But what he said is, it's not in the prime brokerage agreements how much this is worth, there is not anything in the literature.

Is there other evidence that recall -- I agree, conceptually, recall and rerate seem like important things, but there doesn't seem to be anything that corroborates that.

MR. PASKIN: Well, here it is, your Honor. This next slide --

THE COURT: OK. Sorry for being impatient.

MR. PASKIN: No worries, your Honor.

The top bullet is Mr. Olson's point, and it is what they said in their brief. They say it's usually unnecessary and of limited economic value. And what we say is the bullet below that. The overwhelming evidence in the record shows otherwise.

Now, with respect to the academic literature, they are right. There is no specific academic literature that says recall protection or rerate protection in stock lending has this value that has been measured as X. There is also no

literature that says it doesn't have this value. The literature is silent on this issue.

So the fact that the literature is silent, most likely because of the lack of data to analyze, to even address that question, you know, that doesn't mean that it doesn't exist. Here, in this case, we have the benefit of having been through years of fact discovery, and the fact discovery was extensive to say the least. 100 depositions, millions and millions of pages of substantive documents, and literary hundreds of millions of records of transactional data that is not available to any academic studying the issue or anything like that. I mean, this is first-ever type access to this kind of data.

So the fact record here paints a very different picture than what Mr. Olson says. And to be clear, you know, it doesn't even have to be recall and rerate protection. It doesn't have to be universally important in the mark. But if it's important and valuable to some or many class members, that's a problem for class certification. Because for those members, we're entitled to present the individualized evidence that shows that they value it differently. If the plaintiffs' models haven't accounted for those differences in value, they can't make a fair price comparison. That affects both Zhu's work and it affects Asquith and Pathak's work, which is why we are addressing it up front.

So I'm going to try to get through some of these

slides quickly. But we have an industry expert whose name is Fabio Savoldelli. He spent 25 years in the shorting business. He knows this stuff well. He didn't purport to do sort of econometric analyses. He is an industry expert based on his actual experience in the industry, and he gave his opinion, which is many short sellers really value this.

The plaintiffs, they have no industry experts, not to rebut Mr. Savoldelli. They have no industry expert to rebut our lending-side industry expert, Mr. Pridmore. They just rely on their sort of econometric guys who have studied markets, who have been sort of outside observers to over-the-counter markets. None of them has ever worked for a moment in stock lending. They don't know the actual dynamics about how the market works. They can theorize about it, and they have.

So it's kind of telling, when you have a case where you put forward industry experts and your adversary doesn't. It would be one thing if when they first filed their class cert motion that they didn't have that. OK. But when they saw in our opposition that we had industry experts on both sides of the market, and then both in their reply and in their sur-surreply they respond with zero, that is pretty telling. Because the evidence is overwhelming about what these market dynamics are, and it comes right out of the extensive fact record here.

So AQS executives. AQS is obviously really important

here because it is the primary target of the alleged boycott in this case. AQS was trying to build an anonymous trading platform for stock loans. They failed. Now, they recognized, as they evaluated it, they recognized the importance of this issue. And I'm not going to read the quotes for your Honor. Your Honor can look at them and read our cites and all that. But the one that I want to point out is from Mr. DePetris, the top one, talking about recall and rerate protection as the most highly valued elements of the product. The reason I want to talk about that with respect to Mr. DePetris is he's not just the founder of AQS. He was also a paid consultant to the plaintiffs. The plaintiffs paid him over $100,000 to help them in this case. Notwithstanding that, he can't run away from what he said contemporaneously about what actually matters in this market and what AQS hoped they could and tried to, but ultimately could not solve for.

Also really important, hedge funds. The hedge funds here, they are the borrowers class. They represent the vast, vast majority of all stock borrowing. And the quotes we have here, which include declarations from hedge funds and deposition excerpts, we have anonymized the names here to protect the confidentiality interests of the funds. But your Honor can look them up in the record based on the cites, and I expect they will all be names your Honor recognizes. But they are major players. Multi-billion dollar hedge funds, and these

are all very senior people. So they all agree, the stability of the borrowers and the stability of the price are critically important to certain trading strategies. It is really not a controversial point, and the record evidence all goes one way.

I will point out, your Honor, from plaintiffs' presentation slide 98, they refer to in the middle of bullet point a couple of hedge funds that they say would have been early adopters of the AQS platform and the exhibit that they cite on page 98. It's basically an AQS roadshow piece. It's a slide deck that was presented for people to investigate AQS. It wasn't actually about trading on AQS.

When your Honor compares the notes of what the actual hedge funds executive's said from our evidence with what AQS said about them as potentially using their platform, I think your Honor will see that there is quite a difference between what was actually happening and what these people actually believed and what AQS was saying to potential investors in its marketing materials.

Prime brokers also agree with this. I'm not going to dwell on the prime broker evidence, but not only from the defendant witnesses, but also from non-defendant prime brokers who testified to the critical importance of loan stability. As I have alluded to, loan stability is also an issue on which -- excuse me. I'm sorry.

Loan stability is also an issue on which the

importance and value of it varies from class member to class member. Dr. Zhu himself acknowledges that the value of loan stability depends on the hedge fund strategy. Because, again, if you're a high-frequency trader and you're shorting a stock for a couple of hours, you don't care that you can get recalled or related on a daily basis. But if you're shorting Tesla, hoping that at some point in the next weeks or months or whatever that, like, Tesla is going to hit a stumble and you're going to profit from your strategy, you really care about it a lot.

And the only way to determine whether a class member values this -- and that goes to the question of whether a class member would ever be willing to switch to a platform, whether a platform is a viable option, whether a class member could credibly threaten to go to a platform, and whether they could exert any kind of pricing pressure under plaintiffs' but-for scenario placed on a platform, depends on answering these questions and valuing these issues.

So, to make it very clear, though, the declarations and everything that we have here -- and there is no evidence that the plaintiffs have pointed to going the other way. There is no record evidence saying this stuff isn't proper important. And even if the plaintiffs were able to put in sort of anecdotal evidence to that effect, that only highlights the problem here. It only highlights the differences with which

class members view these services and value these services, and why it is so important to account for them in any assessment of injury and damages.

Now, plaintiffs also suggest that, well, AQS and platforms, they can do this too, so there is really no difference. What are you talking about? Again, that's not what AQS believed. AQS, this guy Poliakoff, he was the head of technology, and he wrote all sorts of white papers, you know, analyzing the market and hypothesizing about ways in which AQS could do it. The first quote comes from an e-mail of him, the bottom one, it is quotes that come out of an extensive sort of, you know, white paper he wrote analyzing the market. He says, a multilateral anonymous system like AQS attracts unstable supply, leading to excessive rerates and excessive recalls.

That's not us. That's AQS. That's AQS saying that. They certainly understood the market they were operating in. They were trying to solve for these problems, and ultimately could not, but they certainly understood the way the market worked.

THE COURT: And the next quote, the next two quotes on that same page from him, though, AQS was vulnerable because AQS wasn't offering recall and rerate protection, right?

But a platform that did might not have that problem?

MR. PASKIN: Well, the issue, your Honor, is that -- I'm going to get to sort of what AQS did, which is essentially

the way there are other examples that deal with this. It's not that there is -- there is a way that platforms manage and allocate recalls.

We can switch ahead, you know, a slide because, what AQS called it, their co-founder, they called it the wheel of misfortune. It's not really a very flattering term for their method of doing this, because with AQS, anything that comes into the system has to come out of the system. It's a closed system.

So if a lender in the system issues a recall, a borrower in the system has to get hit with it. It's a one-to-one relationship, and they had an algorithm that basically decided who gets hit with it today.

On the other side, you know, there are a couple of things that prime brokers did and could do to protect their clients. Number one is they could play favorites. They could say, I'm not going to let my really important hedge fund client, you know, get hit with a recall because I know that they are doing this investment strategy. And I know a recall would be really bad for them and, therefore, we're going to make sure that even if the lender recalls us, we're going to replace it.

The other thing that hedge funds can do -- excuse me -- that prime brokers can do is they have other sources. Ms. Yablon alluded to this in the beginning of our

presentation. Hedge funds don't just pass them through. They can go -- the prime brokers -- I keep missing that -- but the prime brokers, you know, they also have clients who were largely long at stocks and who have margin accounts. And the margin agreements with prime brokers allow the prime brokers to use the long shares of other clients to satisfy the shorting needs, the borrowing needs of other clients.

So they have -- they call this rehypothecation. They can go in and take client A's long stock and go lend it to client B, which would be completely outside of the AQS system. The AQS system has no ability and no platform, that's just a mechanism for matching up lenders and borrowers, with respect to stock lending, can do this.

The other thing that prime brokers can do, which, you know, is sort of a last resort but sometimes happens, the prime brokers can just go into the market and buy the stock so they can lend it to the hedge fund. They don't want to do that because that is the most expensive recourse for them. But in order to protect their clients and to protect the trading strategies of their clients, that is what they do sometimes.

AQS doesn't provide those services. AQS is a completely neutral processor of inputs and outputs going from one to the other. So whatever goes into the system has to come out of the system. They don't negotiate with lenders to try to, you know, convince them not to recall, which prime brokers

do. They just take it and pass it on, and the wheel of misfortune decides who is the unlucky hedge fund that gets hit with it today.

By contrast, this next slide -- I'm not going to spend much time on it -- but prime brokers in the real world, they don't pass recalls on. You've got this quote from JPMorgan, could confidently state we don't recall clients in the U.S., at all. That's pretty compelling.

The one from UBS above that, 73 recalls for UBS in one week with a value of over $100 million, none were passed on to hedge funds. That is the prime broker's service at work in the real world. That is a service that not only can't and wasn't replicate -- couldn't be and wasn't replicated on AQS. It's a service that can't conceivably be replicated on any kind of anonymous trading platform.

THE COURT: Do the prime brokers agree with their clients in writing that they are going to provide that?

MR. PASKIN: No. No, they don't. What the prime brokerage agreements speak to is they speak to -- they speak to the right to recall and the right to rerate. I mean, the agreements say that those are things -- and that's the way the market operates, because it's what they call an overnight market. Every day there is a risk that borrowers take that they could get recalled and they could get rerated. And so the question and where the relationship matters and the history

matters is -- and that's in the quotes that are sort of throughout our papers, when he talks about a marriage and knowing your counterparty.

That is what is so important about knowing your counterparty, because even though they have the right, there is all of this evidence that shows AQS, you know, oh, things are rerated day after day after day after day. Stocks are recalled, even general collateral stocks, recalled from borrowers the day after they borrow it.

(Continued on next page)

MR. PASKIN: It's inconceivable that a general collateral stock should ever be recalled, period, because there's more supply than demand. And so the notion that a general collateral stock gets recalled on AQS, means they're not even trying to provide the same service. And when it comes to hard to borrow, it's obviously very different. It's not as simple as they say, where, oh, you can just go -- if you get recalled, you just go out and borrow the shares somewhere else. You can't do that with hard to borrow.

The hold point to hard to borrow and the reason why it's expensive to borrow, you know, hot stocks, is because there's not enough supply to meet the demand. So if you get recalled from your position as your hedge fund, you're most likely out of luck, unless your prime broker can figure out a solution for you. And AQS or any anonymous platform, they can't figure out a solution for you.

THE COURT: I get the point about the anonymous platform being your view that they're different, if you want to skip ahead to another --

MR. PASKIN: OK.

THE COURT: I'm not saying I agree, I just understand the point.

MR. PASKIN: I understand. The last point that I'm going to make on that is, Dr. Asquith and Pathak, purported to do an analysis of recalls. And they say, well, oh -- and the

plaintiffs say in their briefs, recalls on platforms and recalls from prime brokers are really the same, look at the data. Well, the data they looked at is the data of lenders issuing recalls to prime brokers, and those are not the same as recalls getting passed along to short sellers, because the short sellers don't have them passed along by prime brokers. And on AQS, it's a one-to-one relationship. Everything going in is coming out.

They also make points about potential in their papers and in argument about, well, you could have term contracts to solve this. Well, if you need to establish, you know, a short for two weeks or two months or two years, well, you can just contract for that length of time.

Again, we all wish that we could know with perfect precision how long you need to get the short on, but that's not how the world works, and that's why the mark works the way it does. The stock that may go down and you may be able to cover your position tomorrow, maybe next month or maybe next year, but you can't sort of say in advance, I'm going to need a short here for two weeks and give me a contract for a two-week short. It doesn't exist because it doesn't make sense in the short-selling market.

Now, briefly on lenders. Loan stability also benefits lenders, because lenders who have reputations for stability, they can command better prices or attract more borrowing.

Mr. Pridmore, our industry expert talks about that. Mr. Cestaro and Mr. DePetris from AQS talk about that. And again just as with Mr. Savoldelli, the plaintiffs has no industry expert, no expert with any stock lending expertise at all.

A couple of other quick points on just market differences. Lenders, they can also benefit cause for lenders, GC utilization really matters. They've got all of this GC stock sitting around. They can leverage their ability to give access to prime brokers for hard to borrow to get prime brokers to borrow more general collateral from them, which the lenders really want.

On a platform, every trade is its own unit, and there's no linkage or anything like that. It's just you put into the platform what you want to put in, and the platform will allocate it how it allocates it.

So Dr. McCrary did a data analysis from locate data which confirms this point about short sellers. Short sellers also, they get preferential access to hard to borrow. I sort of covered that before in the relationship issues. Great hedge fund client, they go to their prime broker and JP Morgan says, sure, we'll get you access to that stock. It's really hard to come by right now, but come whatever, we will figure out a way to help you make your investment.

Their additional services that all or part of the

bundled package, there's no dispute that there's a bundle package. The only issue here is that the plaintiffs' expert value, the other elements of the bundle as zero. Whatever the value is -- and this goes for the loan stability and all of the other stuff -- whatever the value is, it's not zero. It's something greater then zero and it varies from class member to class member, and it requires an individualized inquiry to figure out how important it is whether a platform is a viable alternative, all of that.

So there was some talk during plaintiffs' presentation about confidentiality and transparency and also they referred to this SEC proposed rule. So the issue is not one of an anonymity on a platform. A hedge fund that goes on a platform and borrows some huge quantity of stock. It's not so much that they care that their name is being disclosed. Oh, Millennium Partners just borrowed, took on a huge borrow so they're taking on a huge short position.

It's the market for shorting is so illiquid, and the size of the trades are so big, that just the existence of the trade being reported in realtime on AQS or any platform means that everyone in the market knows somebody just took out a big short position on Tesla. And that gives the market intelligence about the trading position of someone. Maybe it's Millennium. Maybe it's a different hedge fund. Maybe it's Steve Cohen. Who knows who it is, but that gives the market

the ability to put on a short squeeze. It impacts the profitability of shorting for the hedge funds, and hedge funds don't like that. It goes to the same issue that they hire Davis Polk about the complaint. They don't want anybody to see their trading activity and be able to decipher their strategies even after the fact. Let alone how bad that would be if it was happening in realtime, the moment that they're borrowing.

And, in fact, the SEC, highlights this problem that these dynamics, by increasing short selling transparency, it decreases short selling profitability, so stock lending here is the tail wagging the dog. The short sale is what matters to the hedge fund. The stock borrowing is the ancillary service that they need to engage in order to do it from a regulatory perspective.

Let's turn a little bit to Dr. Zhu. Just to sum up on the product difference. Dr. Zhu doesn't compare the product differences. Dr. Asquith and Pathak don't. They don't value them, and it's clear that these services, these differences matter and are valuable, and there is no apple to apples comparison. That's a fundamental flaw, and it invites all sorts of individualized inquiries, class member by class member who we would march through a trial explaining the value of these things, how much they're worth, what they would pay, why it's important to them.

The plaintiffs say, well, none of that matters because

we have this theory that says that the price on a platform is gonna have this carryover effect and reduce prices on the over-the-counter market as well.

They say it's a world of choice. Everybody gets to choose. Everybody wins. You can trade over-the-counter if you want, but your prices will be lower, and all of the stuff that you no longer get through over-the-counter trading because the prices have come down to eliminate those additional services, well, you'll just buy them separately. We're not going to bother to value what they are, but you'll just buy them separately and everyone will come out ahead.

It just doesn't work. As a basic matter of sort of antitrust economics, if platform loans and over-the-counter loans are either across the board or in some instances not valid substitutes for one another, then they're whole sort of price effect carryover theory falls apart. They have to be replaceable or else it doesn't work.

So Dr. Zhu, slide 35 here. It actually looks kind of similar to plaintiffs' slide 60. What we don't agree with them that Professors Asquith and Pathak put forth a just and reasonable approach to calculating damages. A lot of the checkmarks are the same because Asquith and Pathak approach actually does try to address the right question. It takes real data, real prices in the actual world, and compares it to an estimate of what prices would be in the but-for world.

THE COURT: As I understood what they were saying though is that's not Dr. Zhu's purpose. Here's there to prove impact, not calculate damages. It makes sense that there would be Xs in those boxes.

MR. PASKIN: Well, it comes back to a couple of things. First of all as I said at the very beginning, your Honor, antitrust case after antitrust case looks at the question of impact by asking the question, What did you pay in the real word, and what would you have paid in the but-for world?

Because here, Asquith and Pathak's model and Zhu's model disagree. We can impeach Zhu's model with the Asquith and Pathak model which is better because it actually tries to answer the right question. Zhu's model is -- I'm going to get into it -- it's sort of a theoretical sort of mind exercise, but it doesn't use the right inputs to answer a relevant question. It's basically saying, well, if you assume that prices are a function of search costs and search costs come down, well then lo and be hold, prices are going to come down.

It's just a truism, but it doesn't actually apply to the dynamics of this market, and there's no way to take actual transactions, actual class members trades and measure them in any way as to whether they've been injured or not, because the damages question is just putting a finer point on the question of like, Is there injury above or below zero? And if the

damages model predicts that lots of the injuries are zero or below, well then an injury model that says, well, everybody's injured obviously is wrong.

The Zhu model is really -- it's like in the *Aluminum* case with Judge Engelmayer. It yields -- this is a quote from Aluminum. "It yields false positives, and it masks uninjured class members by using an averaging mechanism to allocate injury." That's what it does, and it's because it doesn't even attempt to answer the right question.

There can be no dispute that in assessing injury the right question is, Did you pay more in the real world or in the but-for world? And if that question can't be answered based on the model on a individual basis, well then they can't say, well, it applies to the class as a whole.

THE COURT: So why don't I just ignore Dr. Zhu and just look Asquith and Pathak?

MR. PASKIN: Go for it, your Honor. If you do that, the answer is, class cert has to be denied because Asquith and Pathak's model, even without the adjustments that Mr. Wick is going to talk about that are based on the actual record evidence in the case as opposed to their totally unrealistic assumptions, Asquith and Pathak's model predicts 30 percent of class members are uninjured. And if you make adjustments, their numbers go through the roof.

So, yes, go ahead, your Honor, and rely on Asquith and

Pathak and push Zhu aside because Asquith and Pathak attempt to answer the right question, and the answer that we get is class certification has to be denied because individual issues predominant, because it identifies many, many, many uninjured class members.

Here's one of my favorite charts. This is the real world pricing data. The actual transactional data are these blue bars. And as everybody concedes, in the real world of over-the-counter loans, pricing of stock loans has a wide dispersion. There's light of price disparity, covers this whole map.

Zhu's model uses this little red range in the middle, that's what Zhu says are his, quote, unquote, real world prices. Well, they're obviously not real world prices. In fact, only 3.4 percent of real world prices fall in Zhu's range; 69 percent are lower, 27 percent are higher. It's not even remotely real world prices.

And so what's the plaintiffs' response to that. They say, well, it's okay that Zhu didn't use actual real world prices, because he got his assumption about his real world pricing range from Asquith and Pathak, and they analyze the real world pricing data in order to give him that assumption.

Well, that's interesting because in their own model, Asquith and Pathak use the actual real world prices. They use all of the stuff that makes up these blue bars. But for

whatever reason for Zhu, they gave an average, and Zhu used an average to conduct his sort of mathematical exercise. It's obviously wrong.

The average -- it might match -- it might give the right answer for some class members, but it doesn't give the right answer for all class members because they there are class members whose real world prices are above, below and miles away from Zhu's estimate or assumption about real world prices. So at best what plaintiffs are saying is because Asquith and Pathak were involved and used real world pricing data, it's a good average.

Well, if it's a good average, that's not enough. Just as in the *Aluminum* case, averaging here masks all sorts of uninjured class members here because they're all sorts of people who are not average, all sorts of traders who are not average.

Just to dig into a little bit of why is it that Zhu comes up with this. It goes into this and Mr.Olson was talking about it earlier. Zhu makes these assumptions about whether customers fast or slow, and I found the chart that he put up, sort of the math that he put up, page 26 of their slides.

Well, it just sort of proves the point that this is just a mathematical exercise. Yes, if you assume that prices are a function of nothing other than search costs, and you also assume that search costs decrease such that the proportion of

fast to slow traders goes from 28 percent to 50 percent, well of course the answer under that scenario is going to be that everyone is injured. That's like saying, well, three minus two is always one. Of course it is, but it doesn't actually study the actual market data, and it tells you nothing about whether actual class members are injured.

It doesn't even tell you an average on it. It tells you nothing at all. It doesn't factor in any of the other things that goes into pricing. It assumes that pricing is nothing other than a function of search costs, and it's not.

The other thing about Zhu's model is to the extent prime brokers do know when customers -- when clients are fast or slow, Zhu's model is binary. Mr.Olson made a comment that, well, Zhu uses this fast and slow, but really it's sort of a continuum and, whatever. In Zhu's model, there are only two answers. You can be fast or you can be slow. And if you're known to be fast, by definition Zhu's model assigns injury -- assign damages as zero, assigns injury as zero. Because if a prime broker knows that the client is able to sort of price shop, if the prime broker knows that the client is checking on Kayak, then the prime broker is forced to give that client a competitive price. That's what Zhu's model tells us.

And the only reason that Zhu's model works, is because Zhu makes an assumption that the prime brokers don't know, and that's wrong, because the evidence -- turning to the next

page -- overwhelmingly shows that is not the case. There are declarations from the prime brokers themselves talking about this, talking about knowing which clients are multi-primed or not, which is sort of the same as saying whether they're fast or slow. There's no evidence rebutting any of that.

They complain that, well, we've put in declarations from witnesses from our clients. Well, of course we did, but there's no evidence pointing the other way. There's nothing on which to challenge any of that evidence. And the hedge funds themselves put in evidence talking about using one prime broker against another in order to price shop. So there, the prime brokers obviously know that the hedge fund is multi-primed and price shopping because the hedge fund is trying to leverage that fact to get better prices.

And Dr. Asquith and Dr. Pathak, or I guess Dr. Asquith in his deposition admits that this is the case, that you have to deal with multiple prime brokers, and the prime brokers learn about what one another are doing and so that gives this pricing insight and this price transparency insight to the prime brokers. So that's why the first sort of half of Zhu's analysis or the first half of the required analysis, what are real world prices, Zhu doesn't use them.

Then the question is, I have to compare real world prices to but-for prices. Lo and be hold, Zhu doesn't use but-for prices either. He says that his model examines an

internal step and should not be interpreted as the prices specific class members would pay. Professors Asquith and Pathak do that.

And Professors Asquith and Pathak in their depositions say, yes, in fact, we did do that. We model the but-for world, where Professor Zhu did not model the but-for world. So both sides of the comparison. Are you comparing real world prices, no. Are you comparing there to a prediction of but-for world prices? Again for Dr. Zhu, no.

A totally separate flaw with Dr. Zhu's model. He has no search cost model for the lender side of the class. He says in his report, he says, "Well, quantitively it would be the same for the other side of the market, where beneficial owners enter into lender transactions with the dealers." As Mr. Wick mentioned before, if that's what happens on the other side of the market, that proves that the but-for world harms lenders rather than helps them. Because as Mr. Wick explained, when lenders are lending to prime brokers, the prime brokers are the ones who incur the search costs. The SEC recognizes this. It's on the slide. Dr. Asquith and Pathak recognizes this.

If the prime brokers have their search costs coming down, they can borrow from lenders for less, and that means lenders are getting harmed. So they don't have a model at all that explains that. And to the extent you want to apply sort of an extension of the search cost model that Zhu used for

borrowers to lenders, it means that they lose because they can't demonstrate any harm, let alone harm to every lender.

THE COURT: But do lenders do any searching now? I thought it generally went just in the other direction, that it was the borrowers who were the ones who were sort of taking the first step.

I know you're saying the prime brokers do the searching for them. It sort of switches the direction of the transaction as I understood you were explaining it?

MR. PASKIN: It's not so much that it switches the direction as that it sort of flows through. You can't say flowing through from left to right, from lender to prime broker to borrower reducing search costs on this part of it brings costs down, but on this part of it somehow brings costs up. It just doesn't work that way.

And to the question of, like, how much visibility do lenders and borrowers -- do lenders and prime brokers have into each other. The lenders are largely, not entirely, but are largely represented by these other intermediaries, agent lenders, huge, huge, huge custodial banks and institutions that aggregate lender portfolios and negotiate with prime brokers over pricing, etc. So, yes, do agent lenders such as BlackRock have visibility into multiple prime brokers, you bet they do. They deal with all of them.

THE COURT: I guess it's a slightly different

question, maybe I'm just not asking it correctly. Are the lenders really shopping themselves the way that the borrowers who are wanting to do a short sale in a particular stock needs to then find somebody who will lend it to them?

MR. PASKIN: Certainly with agent lenders involved they are because you have huge institutions, whether it's the defendant prime brokers or the agent lenders like Northern Trust and BlackRock and State Street, etc. There is a lot of negotiation, and they're all dealing with everybody, so I hope that answered your question, your Honor.

THE COURT: Sort of. It's okay.

MR. PASKIN: Is there anything else I can help you with?

THE COURT: No, it's okay.

MR. PASKIN: Just a few more seconds on the SEC because they make a big issue in their sur-surreply brief and also in this morning's presentation about the proposed rule from the SEC. They say in their brief it fully vindicates plaintiffs' impact showing. It does not.

So the SEC -- I'll grant them, the SEC proposed a rule that would allow for post-trade disclosure of stock loans, and the SEC wrote this big fat report that analyzes that issue and ultimately the SEC seem to believe that that would be a good development for the market. Fine.

The SEC says nothing to the effect that all traders in

the market will benefit from this. In fact, if you read the details of what the SEC analyzed, and we did, maybe they thought that because it was coming in at the last minute we wouldn't look at it, but we did. There's like numerous places where the SEC in doing their robust analysis talks about there being winners and losers from these sorts of developments.

If there's going to be transparency in the market beyond what there is now, then some lenders are going to be worse off. Some borrowers are going to be worse off. There are going to be implications for short sellers because of the disclosure of their trades. All of that says that there are winners and losers. The SEC says that there are winners and losers by these kind of developments. It's only Dr. Zhu who says there are no winners and losers. The SEC says there are winners and losers.

And once there are winners and losers from any kind of change or proposed change to a market, it requires individualized inquiry to figure out who the winners are and who the losers are, and that's what we will put on robust evidence at trial for not just the handful of examples we have here for dozens, hundreds, thousands of class members about how all of these factors impact them, and how it alters the analysis.

So I just want to spend two seconds on Dr. Zhu's yardstick analysis. I don't think it's worth much time because

it's not actually an analysis of the stock lending market, and it's really just sort of like a sanity check that he says, well, look at these other markets where electronic trading happened and it was pro-competitive.

So even if that's the case, all of the support there, there is nothing in that, that asks or answers the question that all traders in the yardstick markets benefited. It doesn't say that at all. It all talks about generalize benefits. If you bring costs down, there's going to be generalized benefits to the market. It doesn't do the sort of analysis that's required for class certification that is, Does this apply to everybody or are there individualize inquiries that would have to be done in order to figure out if a particular trader -- if a particular class member benefits or not?

And the yardsticks are not remotely comparable. I mean, the things that he talked about, the U.S. stock market, corporate bonds, whatever. The fundamental characteristics of stock lending are these things. It's a long term. It's the marriage. It's not fungible. These are bespoke products. There's incredibly small liquidity and incredibly big trade sizes. Like that's not what these other markets look like at all.

And I thought, you know, in particular the example -- now I forget if it was Mr.Olson or Mr. Brockett who gave the

example of renting -- he compared the stock market. He says, well, it's stocks. Whether you buy them or you borrow them, what's the difference? It's like renting or buying a house.

It's not like that at all. It's not like that at all. When you borrow a stock, you're not betting that it's going to -- that the price is going to go up. You're not borrowing it for the same purpose that you buy a stock. You buy a stock because you think the price is going to increase, and you own it to have the risks and benefits that go with it increasing.

You borrow stock because you're shorting the stock. You think the price is going to decrease. You have the complete opposite risk and benefits. And from the lenders perspective, there's no transfer of risk at all because the lender doesn't give away the sort of profit or lost that it will ultimately get on the stock. It's just lending it out for a few basis points.

So the analogy is completely misplaced, and I thought it was kind of a funny one. But with that, I don't think there's anything else that needs to be said about the yardstick analysis, unless your Honor has any questions.

THE COURT: No. Go ahead.

MR. PASKIN: Thank you, your Honor.

MR. WICK: Your Honor, are you able to continue or would you like a brief break?

THE COURT: No, I can keep going.

MR. WICK: Good afternoon.

Mr. Paskin explained why the plaintiffs' so-called common proof of classwide injury is, even standing by itself, incapable of proving injury to all class members, each one of the thousands of class members. There's an additional reason why individualized inquiries into injury will predominant at trial, and that is that the defendants will present class member by class member evidence to disprove the generalized broadbrush claims that everybody was injured in individual cases.

Let me start with two quick background legal principles. The first is that the defendants' individual class member by class member alone can defeat predominance. Mr. Brockett suggested that if they have some common proof, then a reasonable juror might be capable of believing their common proof. That's enough. They win. It's not like that, your Honor.

If it is equally true that a reasonable juror might accept the defendants' individualized class member by class member showing at least in some cases as disproving the generalized showing of common injury, well then as long as a reasonable juror could believe the defendants' individualized evidence, the defendants has an absolute right to present that evidence at trial. Defendants have the right to present exactly the same evidence at a class action trial that they

would if there were individual actions brought. If one class member at a time, they had come and sued and we would have a right to put on individualized evidence that they were unharmed, under the Rules Enabling Act and Due Process and the Seventh Amendment, we have exactly the same right to present that individualized evidence at a class action trial.

And as the Courts on this slide have all recognized, if the defendants are entitled to make large numbers of class member by class member showings that there was no injury, those defendants showing will predominant and will defeat class certification.

A second background legal principle is that the plaintiffs bear the burden of showing that they can identify and remove all unharmed class members at or before trial. Why is that? Because as the DC Circuit explained *in Rail Freight, III*, uninjured class members cannot prevail on the merits, so there claims must be whittled away as part of the liability determination.

Under the Rules Enabling Act it cannot be that class certification will result in even one unharmed class member prevailing at trial. They all have to be eliminated, there's no option. And so the plaintiffs say, well in their papers, well, if it's only a small number of class members that are unharmed, that doesn't necessarily defeat class certification. Well, that depends.

If there are a small number of unharmed class members and it's very easy to identify them. You can identify and exclude them without a lot of individualized inquiry, then it's true, a small number of unharmed class members won't necessarily defeat predominance. But even if there are very few class members that you suspect will ultimately turn out to be unharmed, if you have to go through the process of searching for them one by one, if the defendants would be entitled to put on proof one by one that each of them wasn't harmed, then even if you predict that at the end of the day very few will turn out to be unharmed, the mere act of searching for them, the mere act of looking for them, the process you have to go through to make sure you've identified all of them, that will defeat predominance, and that's what Judge Schofield explained in *In Re Forex* in the quote at the bottom of the page.

THE COURT: What are you looking for in terms of who you want to exclude from the class? Is just the calculation of their damages or is it some other characteristics?

MR. WICK: The first thing, your Honor, that we're looking for is non-users of platforms who would not benefit from the existence of a platform. So we would put on class member by class member evidence at trial to show that many, many class members would not use anonymous platforms even if they existed. And furthermore, that many, many class members are not credible users of platforms. They are not viable users

of platforms. And as a result, they wouldn't benefit at all from the existence of a platform. They could not leverage the threat of moving to a platform if platform trading obviously is not viable or credible for them.

We know that a large number of such class members are likely to exist. We know that a large number of non-users are likely to exist. Professor Savoldelli explained that in his industry expert report. It's undisputed or it's un-rebutted. Mr. Pridmore said the same thing about the beneficial owner subclass. He said many of them would not use a platform, and the plaintiffs have never attempted to controvert either Mr. Savoldelli or Mr. Pridmore's opinions in that regard.

In fact, Dr. Zhu, the plaintiffs' expert agreed that even in the but-for world most trading would occur off platform. He said in his reply report, platforms do not capture a majority share of the stock lending market in the but-for world. AQS concurred. AQS did not see anonymous platform trading taking over the market. They said, we see ourselves capturing 10 to 15 percent of the market. The plaintiffs --

THE COURT: Doesn't that mean though that they just thought there were going to be other competitor platforms to them?

MR. WICK: There weren't any.

THE COURT: I know there weren't, but there could be.

MR. WICK: Nobody other than AQS attempted to launch one in the United States. I don't see any indication in the evidence that that's what they were thinking when Mr. Conley said that.

THE COURT: I think the plaintiffs would say that that was the defendants' fault.

MR. WICK: So they've accused us of boycotting AQS. There was nothing else in the United States to boycott. Nobody even attempted to launch anything to boycott. SL-x --

THE COURT: That's why we're here. That's why when your colleague gets up and says that, liability is irrelevant to the class certification decision, it's hard for me to take that. It's not credible to say that.

MR. WICK: With respect to whether liability is relevant to the predominance analysis, in every one of the antitrust cases in which class certification is denied, it is always true that the evidence on the existence of liability is going to be common and that is never dispositive.

What is generally dispositive in antitrust cases is whether the evidence on injury will be common or whether class member by class member evidence will be necessary on injury.

So as I understand it, even Dr. Zhu is agreeing that platform trading is not capturing the majority share of the market. So what do the plaintiffs say about this. They say that even if a large percentage of the market does not use

platforms, everybody is at least a potential user, and everybody could credibly threaten to move their business to a platform and they could use that threat to leverage better prices from their prime brokers.

Well, defendants case at trial would be to show on a class member by class member basis that that's not true for a great many class members. We would put on evidence at trial to show that many class members just aren't viable users of platforms, and I'll give you some examples.

The first example consists of class members who had insufficient size to justify the cost of signing up for and using a platform. So if your total shorting fees are small and the costs, just the fixed cost of signing up for a platform and paying its annual subscription fee greatly exceeds your total shorting fees, then you are not a viable platform user and your prime broker knows it and you get nothing. You get nothing out of the existence of platform trading. And as we'll see in a minute, there are many such members of the proposed class.

THE COURT: Right. Even taking these categories, why does this have to be on an individual basis? Why wouldn't you just say, the platform that the plaintiffs are asking for is not viable because the market includes people who have one or more of the following five characteristics; and therefore it's a common issue that these people exist, that these proposed class members exist, and therefore what the plaintiffs are

arguing for fails.

MR. WICK: Well, if the plaintiffs wanted to agree with us that everybody who falls into one of these five categories should be excluded from the class, they would be excluding about 90 percent of their proposed class and there wouldn't be much less of it. I don't think that they're offering to do that.

The point is to identify who fits and who doesn't fit into these categories. You need individualize witness evidence. There's no model out there. They can't run some algorithmic model that tells you exactly for who would use a platform and who wouldn't. They can't run some sort of algorithmic model that tells you who is a credible platform user and who isn't. All that has to be done by putting on witness testimony one by one about hedge funds what they are, what they look like, what they do.

THE COURT: You're jumping ahead of what I'm talking about. I think what you're saying is because these five or more types of characteristics exist, that the platform model that the plaintiffs are arguing for isn't viable; and therefore, their whole argument about what the defendants have been doing is -- it essentially defeats causation which is a common issue across the class.

What I'm asking is -- I'm not talking about damages. I'm talking about the viability of the plaintiffs' theory of

the conspiracy and what the conspiracy caused, and it seems to me like you could just argue these things as defeating the conspiracy and causation on a classwide basis.

MR. WICK: That's not what I mean to be arguing, and if I've given you that expression, I've expressed myself badly.

THE COURT: I wasn't suggesting that.

MR. WICK: I am assuming for the purposes of this argument that there is a viable platform, that they do get to 15 market share or 20 percent market share or whatever, and that is viability and there is an operational functioning platform out there in the market. I'm saying even if that's true on a class member by class member basis, we will demonstrate that many class members wouldn't have used that platform; and furthermore, are not credible users of that platform.

And if they're not credible users of the platform, they don't get any benefit from the existence of a platform they don't use. Not only did they not use it, it's no bargaining leverage for them because they're not credible platform users. The threat to move their business to a platform is an empty threat, and Torus is an example of that. It's total trading size was far too small for it to make a credible threat to move its business to a platform.

THE COURT: Why don't we just change the threshold in the class definition?

MR. WICK: Well, that would leave the plaintiffs without a class representative if you kick Torus out.

THE COURT: But there are others or somebody else could substitute in.

MR. WICK: I don't think they would have another representative of the borrower class if they lost Torus, because I think S.A.R.L is conflicted and therefore incapable of representing a borrower class. It goes behind size, your Honor. Maybe you could enlarge the size threshold and say it's got to be a thousand trades or 10,000 trades or 100,000 trades. They haven't offered to do that.

THE COURT: Well, I can do it. I have discretion to do it. Rule 23 provides that.

MR. WICK: And I don't mean to be presumptuous and tell you, you don't have that discretion. What I am saying is, if somebody's going to drastically revise the class definition, I would love to have an opportunity to know what the new class definition is going to be and have an opportunity to respond to it in writing once its been pinned down.

THE COURT: Well, you will, because I will issue report recommendation and tell you what the revised definition is. And as you know, you have the full opportunity to object and tell Judge Failla all the reasons why you think that was wrong. That's the course.

MR. WICK: Understood. There are four more

categories, your Honor, that I don't think you can deal with the way one might propose to deal with small class members by just kicking them out of the class. Another category is class members whose investment strategies by their nature make them incompatible with platform trading. I'll give you some examples: A risk arbitrage fund, a convertible securities arbitrage fund, a merger arbitrage fund, a fund that tries to exploit mispricing between two different instruments.

The record evidence shown at the bottom of the page shows, those kinds of class members are incompatible with platform trading. They cannot use a platform because they have zero tolerance for recall risk. They can't afford the risk that they will lose one-half of their investment strategy before they're ready to relinquish the other half of the arbitrage trait. All of the cites at the bottom of the page say, those types of class members are not credible users of platforms.

There's no model. There's no data that identifies them. The only way to identify funds whose investment strategy make them incompatible for platform trading is identify them one by one with witness testify and with documents.

A third example was foreshadowed by Mr. Paskin. There are class members who derive special relationship benefits from over-the-counter name disclose trading or have specific trading needs that cannot be met on an anonymous platform. Three

examples, a hedge fund that's allergic to disclosing its trading positions, even on an anonymous basis in realtime on a platform.

A second example, a lender whose lending strategy is to leverage it's reputation as a highly stable lender that never recalls stock in order to extract higher lending prices. You can't leverage your reputation on an anonymous trading platform because you're anonymous. No one knows who you are.

A third example, there are lenders whose strategy is, I will only lend you my hard to borrow stock, if you also take my general collateral stock. You can't do that on a platform. And so on a class member by class member basis, we would put on individualized class member specific evidence to show that these kinds of class members can't use the platform, aren't credible users of the platform and therefore get no benefit from the platform.

THE COURT: Why couldn't a lender do a hard to borrow GC combo?

MR. WICK: On the platform?

THE COURT: Why couldn't you post it and just say, this hard to borrow is only available if you take the general collateral?

MR. WICK: At that point, it's not an anonymous platform trade. There's no -- I have never heard anyone suggest that you could write a platform algorithm that could do

that. AQS never suggested that it could do that, and I don't see how functionally it would be possible. I just don't understand how you could do it.

THE COURT: I mean, we put people on the moon and nobody thought we could do it. There are a lot of very creative code writers in the world. I'm not going to put doubts on the limits of what people can come up with in an algorithm.

MR. WICK: I would just say in the record, I don't think there's any indication that anyone has thought that an anonymous platform could do that.

A next category, high cost of platform usage. So the plaintiffs rely on some specific techniques to reduce the cost of platform trading and make them manageable. In particular, they rely on -- to get rid of the very high Basell III regulatory capital cost that a clearing sponsor would otherwise incur for sponsoring transactions through a central counterparty, the plaintiffs use a technique called over-collateralization.

They imagine that those costs would be zeroed out because class members would give 130, 135 percent collateral to their clearing sponsor. Well, there are many, many class members out there that just can't do that. If you're a highly leveraged hedge fund running 20-to-1 leverage, you don't have the ability to post 130 percent collateral, and so it's obvious

from the nature of who you are, you're not a credible platform user. Your cost of hiring a clearing sponsor would be prohibitively high as a result of Basel III.

A final example, your Honor, there is some stock loans that are impossible to trade on platforms. So, an example, non-cash collateralized stock loans. There is no central counterparty licensed to do business in the United States that will accept a stock loan in a non-cash collateralized transaction.

Similarly, voluntarily corporate actions. There is no central counterparty in the United States that will accept a stock loan if the stock is subject to a voluntarily corporate action, meaning like a tender offer, a rights offering, a dividend election. You can't do those on a platform. And as Mr. Kelleher explains in the declaration cited at the bottom of the page here, there are class members whose very investment strategy is to trade around stocks subject to voluntarily corporate action. That class member gets no benefit out of the existence of a platform because he cannot use a platform. It's just not possible.

Torus, if I could turn you to slide 51. Torus provides an example of a type of individualized evidence that the defendants could put on at trial about many, many class members. We would put on witness testimony and documents to show that Torus was not a viable platform user because its

total trading volume was far too small to justify platform trading. We would also put on individualized evidence that Torus, by the nature of its investment strategy, needed what Mr. Savoldelli called a, "single point of execution."

Torus's strategy was to use short sales to hedge options. It's principle investment was an option. It used a short sell as a hedge. You can't take any risk of your principle investment getting decoupled from your hedge. If you do that, you have a risk of the whole investment going sideways on you.

And so as Mr. Savoldelli explains, when you have that kind of a paired hedging strategy, you need to use a single point of execution. You need to execute both parts of the package through the same broker dealer. If you execute half of the package on an anonymous trading platform and you land on the wheel of misfortune, your investment strategy goes sideways on you. It's ruined.

If we can put on class member by class member evidence, there are a lot of class members out there who are using paired package investment strategies incompatible with platform trading. Individualize evidence will also show that Torus had no bargaining leverage and would have had no bargaining leverage with or without the existence of a trading platform.

For example, Goldman Sachs was dropped as a

customer -- I'm sorry. Torus was dropped by a customer by Goldman Sachs. The deposition testimony there is from Torus trader Mr. Simeone, and he says Goldman Sachs basically kicked us out.

What are the implications of that? Goldman Sachs was willing to lose the business rather than offer improved terms of doing business to Torus. Had there been a platform in existence and had Torus said, you better give me improved terms of doing business or I will move my business to a platform. Goldman Sachs would have said, well, we'll very sorry you feel that way, but we've already given you our bottom line. We're willing to lose the business rather than improving our price terms. You can't use a model. You can't use common proof to identify class members where the prime broker is essentially willing to take the risk of losing the business. And if that's the case, they get nothing out of the existence of a platform. You can only identify those kinds of class members with individualized evidence.

The plaintiffs' answer to this is essentially to say, the standard is absolute perfect certainty, perfect knowledge about what a class member will do. Unless a prime broker has absolute perfect certainty that it's class member will never use a platform, then the platform -- then the threat to move business to a platform is always credible and is always effective in leveraging better prices.

Well, perfect knowledge is not the right standard. We would show on a class member by class member basis, that prime brokers often have sufficient knowledge. They often know enough to know that platform trading isn't viable for their customers. They know that because it's easily observable characteristics, like the ones we just went through three slides ago, that show which class members are and are not viable platform users.

THE COURT: This may be a good point to just give us a five-minute break. And what I think by my count, the defendants are at about two hours total, so just I would say be mindful the time you have left.

MR. WICK: Understood, your Honor. Happy to take a break.

THE COURT: Take a break, five minutes. Be back.

(Recess)

THE COURT: Go ahead.

MR. WICK: Thank you, your Honor.

So the second set of class member-by-class member evidence that the defendants will present at trial relates to class members who received worse prices in the but-for world than those they received in the actual world. There are two components to that showing. The first is what was the price you got in the actual world. The second --

Did the slides disappear?

THE COURT: No.

MR. WICK: Mine did, but they are back.

The second component is what would be your costs of using a platform, and that second component is highly individualized. The amount it would cost to use a platform varies greatly from class member to class member.

Looking at the first component of that actual-world prices, the plaintiffs' own model of but-for prices estimates that many, many transactions occurred in the actual world at prices better than they would have received in the but-for world.

So we're looking at what the plaintiffs' model predicts as to better or worse prices in the actual world or but-for world under three different sets of assumptions about the cost of using a platform. If you use the plaintiffs' assumptions, which are ultra low, if you use their experts'

assumptions, than the model estimates that over 30 percent of lender transactions and over 30 percent of short seller transactions were unharmed. Their actual-world prices were better than the plaintiffs' best estimate of the but-for world polices. If you use higher sets of cost assumptions about the cost of using a platform, the percentages go up sharply.

Now, what do the plaintiffs say about this? Well, Mr. Brockett suggested these numbers are skewed by the UBS data. There is no UBS data in these numbers. In the plaintiffs' opening report, they didn't even process the UBS data. So Professor McCrary was forced to guess at how he thought the plaintiffs' experts would process it. When they clarified, they didn't like this data in his reply, he put in a revised set of numbers. And all of the numbers in this deck and all of the numbers in our reply brief purge all of the contested UBS data from the figures. So this exists regardless of that UBS tempest in a teapot.

What do the plaintiffs say about these numbers? When they look at these numbers, what do they say? They say we only want to use the Asquith-Pathak model at the damages stage. We don't want to use it at the injury stage. Defendants are entitled to point out at the injury stage that their but-for prices model contradicts this you search cost model and disproves injury.

But the model at issue -- they say they want to use it

just for damages. But the model at issue, according to the plaintiffs, is the best available means of estimating but-for prices. If those estimates are accurate and reliable for estimating the quantum of injury, they are also accurate and reliable for estimating the existence or absence of injury.

What happens to all of those favorable prices in the but-for world? The 30 to 90 percent of prices that were better in the actual world than they would be in the but-for world, they disappear. The plaintiffs' experts acknowledge that once you give the prime brokers the additional option of trading on a platform. The prime broker is now, in effect -- I've lost my spot -- the prime broker is now, in effect, faster. In the actual world, the prime broker can't necessarily see that some other prime broker's customer will give it a better price than its own customer will give it. Once a platform comes along, now the prime broker gets faster. It can see that it has more choices to trade in the market.

So, in effect, now the class member has to outbid the platform in order to trade with its prime broker. So those 30 to 90 percent of instances in which actual-world prices were better than but-for world prices, those all disappear in the but-for world, because now the class member has to pay more than the platform price. And it's not me saying that, it's the plaintiffs' own expert saying that. That means that class members can very often get the worst of both worlds.

If you're a nonuser of a platform and you're not a credible user of a platform, then you can't leverage the existence of a platform in the better prices. But you can still lose all the favorable prices you got in the actual world because now you have to compete with the platform. You have to give your prime broker a better price than the prime broker could get on the platform. So you can be harmed even though you don't benefit from the existence of a platform.

THE COURT: So if a hedge fund short seller borrower is not good enough to get on a platform, they are probably not going to have a prime broker giving them business either, right?

I mean, is a prime broker -- if somebody is sort of low sophistication and has all those characteristics some of the characteristics you were talking about earlier that are individualized, chances are there is no chance a prime broker would give them any business either?

MR. WICK: Well, I would disagree with that, your Honor. There are plenty of merger arbitrage funds. There are plenty of convertible security arbitrage funds, highly leveraged hedge funds large enough to have a prime broker. They are not compatible with platform trading because of the nature of their investment strategy, the high costs they would incur to use a platform, or etc.

It's not true that you don't get a prime broker unless

you're good enough to get on a platform. You can be big enough to have a prime broker and still be incompatible with platform trading because of your specific investment strategy or your specific trading needs.

So let's look at the other half of the equation, which is the plaintiffs' assumptions about the costs of platform trading. There are three relevant costs to platform trading I would like to walk through starting with the first class member internal costs. When the plaintiffs do their modeling, they assume that a class member has zero internal costs of using a platform. They assume that there is no technology costs for integrating with the platform, there is no systems costs, there is no operations cost, there is no legal and compliance costs. Nothing.

But the evidence is, the record is clear for Mr. Savoldelli, among others, that the cost of doing -- of integrating with the platform are actually very high and they vary from class member to class member. We would put on evidence at trial to show that for many, many class members, their internal cost of using a platform would be high and those costs have to be accounted for to know whether or not a class member was harmed or unharmed by the alleged conspiracy.

The second category of costs is fixed platform fees. So the plaintiffs make no allowance for these in their expert work, even though Dr. Pathak admitted at his deposition fixed

platform fees are real. AQS charged significant fixed platform fees. And he testified, and I quote, they would not go away in the but-for world.

So they make no allowance for this in their work. The defendants' evidence at trial would include showing on a class member-by-class member basis that fixed platform fees, the cost of subscribing to and getting access to a platform, were substantial. They vary from class member to class member.

A third category of costs consists of total clearing sponsor fees. What do you have to pay a clearing sponsor to get you access to the platform and access to the central counterparty? And I'm directing your attention here, your Honor, towards the bottom, the blue line at the bottom, total clearing sponsor fees. The plaintiffs' experts estimate that clearing -- I've lost my screen again, but it's back.

The plaintiffs' experts estimate that beneficial owners could hire and pay a clearing sponsor for a fee of no more than three basis points for each beneficial owner in the class. How do they come up with three basis points? If you look higher up on the table, the plaintiffs' experts recognize and both sides experts agree that every time a clearing sponsor sponsors a transaction, it has to pay three basis points of transaction volume into the default fund.

Now, I mean, Dr. Zhu estimates it is actually about 2.8 basis points but both sides' experts round off to three

basis points. So the plaintiffs' experts say that a beneficial owner could pay a clearing sponsor three basis points and nothing more in order to get access to a platform. The plaintiffs allow zero for operational and overhead costs for the clearing sponsor. They allow zero for profit. They allow zero for capital costs and balancing costs, balance sheet costs, and they allow zero for the costs of the beneficial owner providing collateral margin to the central counterparty. Collateral margin is the collateral you give the central counterparty to protect it from the risk that somebody will default on the transaction.

Defendants' case at trial will be to show beneficial owner by beneficial owner that actually these costs are much higher than assumed by the plaintiffs' experts. For short sellers, the plaintiffs make a similar assumption that total clearing sponsor fees are eight basis points per short seller. They get to eight basis points by summing up a three basis point default fund contribution and a five basis point cost that they assume to be the cost of the short seller giving collateral margin to the central counterparty.

Again, even for short sellers, zero allowance for the clearing sponsor's operational and overhead costs, zero allowance for profit, zero allowance for capital costs and balance sheet costs. And our case at trial will be to show, class member by class member, that actually these costs are

very substantial and they vary from class member to class member.

With respect to fixed platform fees, your Honor, we have a clear record that on AQS, the annual fixed fee of using the platform was about 37,500 a year, if you wanted automated API access. If you were content with manual web access, you could join AQS and pay annual subscription fees and access fees of 10,500 a year. If you take into account just those costs alone and nothing else and run the results through the plaintiffs' model of but-for prices, this is what you get.

You get between -- at the levels of fees that AQS was charging, 10,500 a year or 37,500 a year, you get 56 percent to 72 percent of short seller accounts not harmed at all, not harmed on a single transaction. Now, there is no reason to assume that those fees would have gone down a lot in the but-for world. But even if you assume that they shrink from 37,500 to $1,000 a year, you still end up with quite a significant percentage of class members for whom the model estimates no harm at all, no harm on any transaction. Their total estimated price saving of using the platform are less than $1,000 a year.

Dr. Pathak admitted at his deposition these fees would not have gone away. He said, No, no. They would not have gone away in the but-for world. He continued that we can assume that they would stay as they were.

I'm heeding your admonition to move it along. Mr. Brockett made the point that there are some short sellers that may have had more than one account in the data and nobody knows who they are. Well, he's right. The data doesn't tell us who is who. There are some short sellers in the data that have only one account. There are some who have multiple accounts. We don't know which one is which. We can't identify them because the data is all anonymized.

But what we do know is that that does not explain away this platform fee difficulty that they have, because even if you assume that fixed platform fees are going to be anonymized across three accounts, five accounts per short seller, they are still high enough that they zero out all alleged harm for a large percentage of class members. It would still be over 30 percent of class members that have no alleged harm, even if you reduced those fixed platform fee assumptions by 90 percent, reflecting an assumption that you could split them across ten different accounts per short seller.

Now, there is not nearly enough accounts in the data for there to be multiple accounts for every short sellers by the law of numbers. Many of them can have only one. We know, for example, that named Plaintiff Scera has only one in the data. There is not enough on average for very many of them, for a large number of them to have more than one account. Even if they did have more than one account, that wouldn't cancel

out six platform fees because you can divide that 37,500 a year by five and still come up with a lot of unharmed class members.

THE COURT: If I represent to you that I understand what you're making about costs, would you move on to another issue?

Do you have another category class that you want to cover ?

MR. WICK: Sure.

Let me just mention with respect to clearing response costs, Ms. Levens showed some statistics indicating that there are some -- she showed some figures indicating that they have allowed platform costs of up to 40 basis points. That is combining the platform transaction fee with clearing sponsor fees to make an apples-to-apples comparison. On clearing sponsor fees, they are only allowing what I showed you -- three basis points or eight basis points -- which allows nothing for any capital profit or recovery of overhead.

She showed you that there was a platform, I think it was in Malaysia, where the fees were four basis points of transaction volume. That is just what you pay the platform. That's not an apples-to-apples comparison because she is leaving out the clearing sponsor fee, the internal cost, the fixed platform cost. She is leaving out most of the cost when she makes that reference.

So how does it tally up? On slide 70, if you look at

the combined effects of fixed platform fees and response fees, you end up with a large number of possible permutations where class members could end up. We would need to do class member-by-class member inquiry to see in which particular bucket or which particular permutation any particular class member fits. Depending on what you assume about fixed platform fees and sponsor fees, you could end up anywhere between 27 percent and 87 percent of short seller accounts that model estimates were unharmed on a singled transaction. And if you look at the question of net harm instead of harmed on a single transaction, the numbers go even higher.

Now, Mr. Brockett suggested that maybe this is because there is just some timing error in his model. Maybe it's just that the model doesn't know that the price fluctuates over the course of a day.

Well, with respect to short sellers, your Honor, that is just not true. The uncontroverted evidence in the record shows that prices don't fluctuate over the course of a day. Prime brokers use one price for the entire day on the short seller side of the market, so that cannot explain away these large percentages of unharmed class members.

Beyond that, your Honor, you can't burn the candle from both ends. If they want to say that their model is a little imprecise, it's underestimating damages to short sellers. That means it's overestimating harm to beneficial

owners. They can't shrink the percentage of unharmed short sellers and the percentage of unharmed beneficial owners at the same time. They have to choose one or the other.

The only theoretical way to improve the results for both beneficial owners and short sellers at the same time would be to go back and retroactively reduce their estimate of the cost of platform trading. They can't do that because they have already assumed that most of the costs of platform trading are zero. They can't go negative. There is nowhere down for them to go.

One last point, your Honor, then I'll move off the cost question, which is that Mr. Brockett said the standard for testing injury is you should look for whether there was even one harmed transaction on the part of a class member. If the model tells you there was even one harmed transaction, you should count them as injured. That is not a workable standard and it's not a standard that the plaintiffs meet.

It's not a workable standard because when they measure harm to a transaction, they don't really measure harm to a transaction. A transaction is a lump. A loan can last two years. There can be 700 days as the duration of a loan. What the plaintiffs do when they calculate these numbers about one harmed transaction is they say we artificially pretend the single loan that might last 100 days is really 100 different one-day transactions. That is not what it is. It is one

transaction. It's one continuous loan.

So they artificially assume that if their model tells them on day 47 you could have gotten slightly better price on this loan on a platform, even on the other 99 days, you've got a better price in the actual world. They would count that as a harmed transaction. Their harmed transaction standard is unworkable. They don't know how to run it defining a transaction as a loan as opposed to a single day of a loan.

Beyond that, there are large numbers of class members for whom there is no harm on a single transaction. Those that were not credible platform users, they are not harmed on a single transaction, those for whom fixed platform fees or internal costs exceed any alleged savings. They are not harmed on a single transaction.

Finally, on the beneficial owner side, they can't see or identify -- no one can see or identify individual beneficial owners in the data. All we can see in the data is agent lender accounts that may aggregate out hundreds of different beneficial owners. So if they see on an aggravated agent lender account that maybe one of 100 beneficial owners aggravated up into that agent lender account had harm on one day, they are still treating the other 99 beneficial owners as harmed, and that is what is driving the statistics that Mr. Brockett showed you earlier. It's a false accounting convention.

So the third and final piece of class member-by-class member evidence that we would present at trial would be relating to class members who lose valuable options in the but-for world. When you move some of the liquidity in the market off of the -- out of the over-the-counter market and into the platform market, that means that those who are left behind and stuck behind in the shrunken over-the-counter market have fewer counterparties with which to trade. They have fewer opportunities to lend and fewer opportunities to borrow.

On the balance of this defendants' argument, your Honor, in the interest of time, we will rely on our papers.

THE COURT: OK.

MR. WICK: Quick point on the FTAIA. Your Honor asked Ms. Levens, is there a case like this one that I can read.

There is a case exactly like this one. It's In re Forex. Let me start on the first bullet on the page with what the FTAIA bars application of the U.S. antitrust laws to. There are two situations in which you cannot apply U.S. antitrust law. First, when both the defendant and the class member were operating abroad, the FTAIA says you cannot apply U.S. antitrust law to that, absent some exceptions that are inapplicable here.

Second, when the defendant is operating domestically and the class member operating abroad, that is an export transaction. The FTAIA does not allow application of U.S. law

to that transaction.

In _In re Forex_, we had almost an identical situation to this case. In _In re Forex_, two things were two. Number one, the parties that entered into FX trades did so operating both domestically and operating abroad. Number two, the transaction data did not identify where any given party was operating at the time of their trades.

So Judge Scofield says, Our only alternative is to do a very large number of trade-by-trade inquiry to see where any given party was operating at the time of a given trade. This case is exactly the same, your Honor. The defendants and class members entered into stock loans both domestically and abroad. The U.S. domiciled defendants operated from desks in London, they operated from desks in Hong Kong, in Tokyo, in Sydney.

And all of that is intermingled in the data. There is nothing in the data that tells you where a defendant was operating or where its counterparty class member was operating at the time of any given trade.

Incidentally, although it doesn't matter where the defendant or the class member is domiciled, it doesn't matter where they their citizenship is, as Judge Schofield explained in _In re Forex_. What matters is where they were operating at the time of the transaction. But just as a point of interest, your Honor, the record evidence indicates large numbers of the short sellers whose trades were reflected in the data were

foreign domiciled. So there is certainly every reason to believe they may often have been operating from foreign trading desks. That's the Salvoldelli cite at the bottom of the page.

THE COURT: Is that fixable, though, in the definition of the class? In other words, it says all persons and entities, if you can make them U.S. domiciled and then entered into whatever number of transactions, but that they had to order that transaction from a U.S. desk or something. I just don't see why that isn't fixable.

MR. WICK: Judge Schofield didn't think it was fixable, your Honor. In Forex, it was the case, you could have limited -- you can identify who is U.S. domiciled or not. She says it doesn't matter where you're domiciled. What matters is your operating location at the time of a specific trade.

THE COURT: That's what I'm saying. The trade was issued from a U.S. desk or something, something like that.

MR. WICK: The only way to know whether a trade happened from a London desk or a New York desk or a Sydney desk or a Tokyo desk, the only way to know that is through individualized inquiry. There is no way you can snap your fingers with the common evidence and shift the wheat from the chaff. That's why Judge Schofield denied -- that's one of the three main reasons why Judge Schofield denied class certification in In re Forex.

THE COURT: Well, could the data just be coded,

though? I mean, there is all kinds of coding with the data that you have. Couldn't there just be a code, a column for trades that were issued from a U.S. desk?

MR. WICK: But there isn't. Some human being would have to go out and go interview a class member and go interview a defendant and go look at individualized records and go back to individual humans to find out that answer and put that into the data. Those records don't exist. Somebody would have to go out and do individualized inquiry to create them. Same situation as In re Forex.

THE COURT: OK. I'm not saying, just...

MR. WICK: I understand. Your Honor, with that, unless you have further questions, I will yield to Ms. Yablon.

THE COURT: OK.

MR. BROCKETT: We do have some.

THE COURT: I know. She has about ten minutes by my count.

Ms. Yablon, ten minutes

MS. YABLON: No problem. You will be under ten.

THE COURT: OK.

MS. YABLON: In fact, defendants are going to rest on our papers, and the slides that you have received with respect to superiority.

THE COURT: I was going to suggest that.

MS. YABLON: We'll move on straight to post 2017

damages.

THE COURT: OK.

MS. YABLON: For all of the reasons we have already addressed this afternoon, plaintiffs request for class certification should be denied. But that being said, should your Honor recommend that certification of a class or subclass is appropriate, it must be limited to the original class period.

In their class certification motion, plaintiffs propose for the very first time a significant extension to their original class period. They ask the court to certify a class for a period which extends to either February 22, 2021, or through trial.

Plaintiffs' original and amended complaints which were filed in late 2017 define the end date of the class is through the present. As courts in this district have recognized, and as your Honor mentioned this morning by name, a statement referring to the present generally does not refer to any moment in time beyond when the statement was made. And that's the Hnot case, for lack of better pronunciation.

First, in this case, by agreement of the parties, there has been absolutely no discovery taken for the period of time after December 31, 2017. Plaintiffs therefore cannot establish that they have met their burden for post 2017 time period. What we do know already about the record makes very

clear that stock lending is incredibly complex and is constantly changing.

Plaintiffs have not and cannot explain away the shifts in class membership, market conditions, and prime brokerage relationships that we already know occurred during the period of time for which we have discovery. For example, between 2016 and 2017, at the end of the time during which we have discovery, almost 30 percent of hedge funds changed their prime brokerage relationships, some adding to and some subtracting. Plaintiffs' suggestion that the market would not have changed or that defendants need to prove that it would have is completely backwards.

More importantly, the record that we already have makes clear that those changes did, in fact, happen. Another issue with plaintiffs' request for an extended class period is they have proposed two alternatives that seek only to quantify damages in the post 2017 time period. The first suggesting that we collect additional data, and the second is Mr. Brockett described it as scaling up or extrapolation of data.

As the record in this case makes very clear, and having lived through it firsthand, the collection, processing, and production of data is extremely burdensome, time consuming, and expensive. Plaintiffs' scaling up method for that matter is simply an easy way to increase damages by using the already produced data to augment and get to a larger number. This

method also assumes that the market and the class remained consistent, which is certainly not true.

Most fundamentally, your Honor, plaintiffs' eleventh-hour request for this proposed extension is extremely prejudicial to defendants. As I mentioned earlier, the factors have consistently operated with the understanding that the class period concluded in 2017, and now it is far too late to suggest the reopening of fact discovery. The parties, which includes plaintiffs, represented to this court that all fact discovery would conclude in 2020. This gave the parties almost two years to conduct discovery. Judge Failla endorsed an extension of fact discovery through October 16, 2020, with the stipulation that this deadline would not be pushed absent a showing of good cause. Plaintiffs have not even attempted to establish a showing of good cause. The reason is quite simple. There is none.

The first time defendants and this court learned of plaintiffs' desire to extend the class period was with the filing of their class certification motion, which was filed well after the close of fact discovery. If the court were to decide to extend the class period, it is inevitable that extensive document discovery, fact depositions, and expert discovery would follow. To give some context, the parties already took 99 fact depositions related to the pre 2018 time period, and now plaintiffs seek to add another three and a half

years to their class. This would clearly turn the current case schedule on its head, disrupting defendants' and the court's reasonable understanding that discovery ended three and a half -- excuse me -- one and a half years ago.

The implications for the expanded class period are significant. Plaintiffs seek to increase their potential damages by billions of dollars, while providing absolutely no record evidence whatsoever to support such a request. Therefore, plaintiffs' request to extend the class period should be denied. And if the court were to recommend that a class or subclass be certified, the end date must be set at December 31, 2017.

THE COURT: Thank you, Ms. Yablon.

On the plaintiffs' side, rebuttal, reply?

MR. BROCKETT: We will have some rebuttal. I have a few points to make and turn it over to Mr. Olson.

THE COURT: That's good. Go right ahead.

MR. BROCKETT: Could I?

THE COURT: I can still see the defendants' slides.

MR. BROCKETT: Thank you.

Just a couple points on the conflict issue.

THE COURT: Yes.

MR. BROCKETT: Your Honor, the law is clear that there are conflicts, and then there are conflicts that are fundamental. A conflict that only deals with a question of

allocation is not a fundamental conflict that requires separate counsel. It's not a conflict that goes to the heart of the case. The fact is that both the lender's side and the borrower's side here have a unified interest in proving liability and winning the largest possible damage award. Defendants are the ones that are trying to tear them apart. What the defendants want is for each subclass to be fighting with each other in front of the jury, right. That doesn't serve the interest of either of the subclasses. The only one that would benefit from that is the defendants.

Now, as we see this again, let me go to the slide three on defendants' deck. So this concept of W, it's an input into the damages model. It's something that we have to do to determine where between the spread, prime broker spread, between the lend price and the borrow price, where supply and demand would meet in the but-for world. So we have to choose a W in order to have a but-for price. We have to choose a W in order to determine aggregate classwide damages. But that doesn't mean by choosing these Ws that we are litigating the question of allocation in the trial. The jury is not going to be asked to make a determination of what the correct W is.

Now, if the defendants want to litigate the Ws that our experts have chosen based on objective evidence, they can do that, and we'll have to respond. But what we intend to do is, again, what I told the court in the beginning is that we

intend to submit to the jury the question of what is the aggregate classwide damages, then we're going to go to an allocation phase.

Now, if at this allocation phase after the trial we agree, if the court wants to appoint a special master at that point, an independent allocation party to come in and bless any allocation that is made for purposes of distributing the award, we're fully supportive of that, your Honor. You could even at that point appoint one of our firms for the lender side and one of our firms for the borrower side.

But to do that now so they can fight with each other in front of the jury only benefits the defendant. It doesn't benefit either side of the subclasses. So the defendants here are the wolf in sheep's clothing. They purport to be championing the rights of the subclass, but what they really want to do is to pit the subclasses against each other because they know that helps them either reduce the overall damage award or defeat class certification.

THE COURT: Do you have an example of that in an antitrust case, a special master being appointed for the damages allocation phase?

MR. BROCKETT: Yes, there are in several cases when, you know, you have one counsel and you have a number and you have a settlement fund and you have, you know, counsel that has to make a plan of allocation. Yes, there are numerous

instances. I can submit them in a letter. I can't give them to you. Maybe Mr. Olson has better.

MR. OLSON: I'll just add one. In the Restasis case that was contemplated.

MR. BROCKETT: Yes. It's fairly common to have a special master or settlement, neutral settlement allocation minister come in and bless the allocation in those types of circumstances.

So, now, they made a point -- I want to talk about the LIBOR and the FX cases. They point to the LIBOR and FX cases in support for the notion that there is a fundamental conflict here. Now, in Forex, the problem was that the named plaintiffs and the class members had conflicting incentives to establish whether spread manipulation had occurred on a particular day and what the direction of that manipulation was. So different groups of class members had disputes over what days did the manipulation occur and in what direction it was.

Well, those are conflicts that go directly to the question of liability. That's what was wrong in Forex. There were conflicts over the question of liability. Same thing in LIBOR. In LIBOR, there were directional differences between different groups that created conflicting incentives as to whether there had been a manipulation on at particular day and what the direction of that manipulation was.

Again, just as in Forex, there were conflicts over

whether there was liability in the case and who was liable to whom. In this case, we do not have a question of conflicts over liability. Clearly the defendants concede. Both the subclasses have a common interest in establishing the liability of the defendants for violating the antitrust laws.

Now, so, yes, I made the point about the special master. The other thing I think I said the court could do is appoint Quinn Emanuel and Cohen Milstein to represent the subclasses. I don't think that is in the interest of either. I want to point to one case. It's the National Football League Players Concussion litigation case. It's 821 F.3d 410, Third Circuit case. This is a case where there was a settlement and an objector objected as to whether the settlement counsel had conflicts.

And the court said, OK, I'm going to appoint separate counsel for the subclasses. Again, this was at the settlement stage. And the objector said, well, you have to choose somebody from outside the existing lawyers working on the case, and the court says no, we do not have to do that. The counsel representing the subclasses in the settlement negotiations came directly from the lawyers already working on the case. The court saw no issue with this and noted there was no precedent whatsoever for saying that conflicts counsel must come from outside the group of lawyers always working on the case.

And obviously that makes a lot of sense. I mean, our

firms have extensive expertise in these cases from the work we've been doing on these for many, many years now. And it would not be in the class' interest to tax the class with a whole new set of lawyers who would have to get up to speed in order to properly represent their clients.

And as to Mr. Wick's point that now you can't do this because you have already taken a position here. Your Honor, we're lawyers. If the court tells us that we have to represent this interest, we would do so zealously consistent with our ethical obligations. I don't think there is any question that either of the lawyers on our side, if we were asked by the court to represent one side of this, that we could do so zealously, despite any positions we have taken in this case previous to that.

Now, just a very couple --

THE COURT: Do you want to respond?

I don't know if it's on your list of things.

MR. BROCKETT: Yes.

THE COURT: The points -- I apologize. I can't remember now if it was Mr. Wick or Mr. Paskin that made the point about Torus.

Do you want to address that?

MR. BROCKETT: I'm going to leave that for Mr. Olson, if that's OK.

THE COURT: That's fine. Yes.

Just as a preview, I was hoping to hear from Ms. Levens about the FTAIA points that defendants made.

MR. BROCKETT: Yes, Ms. Levens will address that.

THE COURT: OK.

MR. BROCKETT: Looking for slide 13 in the defendants' deck, your Honor.

I just want to make one point here. So yes, when the way this came about was we asked the banks to produce to us all the trading data of the bank's clients, the hedge funds here. The bank's clients and our clients of this case, the bank's clients in the ordinary course of business, and there were. There were 22 hedge funds that approached us about the concerns about the security of their data.

First of all, that's not a lot. There are thousands of hedge funds and thousands of short sellers and others in this case. So the fact that 22 of them approached us, that's not a huge number. In any event, we worked it out so that only seven opted out and the other 15 who initially had concerns agreed to stay in the case.

Now, I think a question came up in one of the defendants' arguments -- I can't remember which -- about how are we going to try this case. Well, we've always accepted that we really can't try this case with anonymized data. So what we intend to do, if there is a certification of the class, we have to send out notice. In this notice, we're going to

tell class members of the rigorous security measures that we're going to propose for the data, but we're going to give everyone a right to opt out of the class, to the extent they are not satisfied that our security measures are satisfactory to them.

OK. This will be language that we would draft with the court's approval, with the court's input. So yes, we are going to have de-anonymized data for purposes of the trial. And there were several of the defendants' slides that said, well, you won't have this data for trial. No, we will have it for trial, and that goes to this question of other damages calculations. But we will have the fully anonymized data available for all parties to make whatever argument they think is appropriate based on that.

I think that's all. One second here.

THE COURT: If you think of something else, you can come back up after Mr. Olson is done.

MR. BROCKETT: I don't want to waste the time.

Let me leave it at that, your Honor, and turn it over to Mr. Olson.

THE COURT: OK. Pass to him.

MR. OLSON: Thank you, your Honor.

THE COURT: Yes. Do you have a copy of this one?

MR. OLSON: We do not have a copy of this one that is pristine, but we would love to submit one to you tomorrow morning, end of the day today, if that's OK.

THE COURT: Yes.

MR. OLSON: We tried to predict what defendants would argue. Frankly, we predicted we have sponsors to all of it. My challenge will be doing so efficiently and trying to focus with the court is more interested. I just thought there was one point made by defendants today that cuts through virtually everything and crystalized virtually everything. That is when defendants stood up and said what we don't understand is that prime brokers are the luxury option. They are that old-fashioned luxury travel agent that you call on the phone. They are the high-end, they provide the full suite of services.

Now, even crediting that -- and we question whether they've really proven the economic value of these services, of course, and we saw them only rely on the type of anecdotal evidence we predict -- what they are describing is a world and a market in which the only options for Americans to travel are by calling the luxury high-end travel agents on the phone. Those are the only options that exist.

Let's imagine that and imagine how much it might cost to fly in that world. Where the only way you can comparison shop would be to call your luxury high-end travel agents who may or may not pick up the phone. That's the world of the stock loan market.

Now, let's imagine those travel agents got together and blocked any and all electronic platforms from coming into

the market. They block Kayak and Expedia. They block Google Flights. By the way, it is completely false for the defendants to suggest that we have only identified AQS as the only platform. We have identified multiple platforms that tried to enter the U.S. market. Those include SLX, blocked from the U.S. market as well.

Now, the question for the court, the question for the jury ultimately will be what would be the effect of that. The luxury high-end travel agents got together, they blocked any and all electronic platforms from coming. They block maybe the budget ones. they block maybe the ones that provided a few extra services.

The question for the jury in this case will be, was it only a limited number of people who were harmed by that? Would the prices, if those platforms entered, only have gotten better for some people? Would the options have only improved for a few people? Do we have to go American by American and try to model exactly how they would have used the platforms versus how they would have used the luxury high-end travel agents or does the economics prove that when platforms enter a market and make the market much more transparent and competitive and provide better options, everyone benefits? And that's our case.

Now, how do we prove that? We prove that with Dr. Zhu. I'll get to everything in a moment. But the point I want your Honor to understand is, Dr. Zhu's work that won the

first prize in a leading federal economics journal is the best way to test that question. It is the leading model in financial economics of how to answer that question. That's why we picked Dr. Zhu as an expert and presented it to the court.

This is not some trivial right conclusory throw-away. That's not why it got published and peer review and won the first prize in the leading financial economics journal. Defendants are really playing a trick here. They are saying, your Honor, we are baffled. We don't understand why the plaintiffs here didn't do the same thing people do on your regular price fixing case, like the Rail Freight case.

Why didn't they run a regression model and compare but-for prices to actual-world prices, where they use the transactional data and strip out the effects of the conspiracy? We're just so confused why they don't do that. They know the answer. The answer is because that was not possible.

In this world, what is only the luxury high-end travel agents, there have never been the platforms, you can't use the transactional data, and you can't build a regression model that strips out the effect of the conspiracy because there was no clean period. You can't do it. They know that, and that is why we didn't do it here. That is why we turned to the best options that we had available, and those come from Dr. Zhu, one of the leading experts in the world.

Now, your Honor asked about Torus. Torus is plainly

an adequate class representative. I'll just take issue, first of all, with the blatant falsehood said by my friend from the defense who said, Ah, we got this one guy Simeone who said he didn't know much about what a hedge fund is and he's a trader at Torus. So that shows Torus is very unsophisticated. It's false.

They deposed multiple people from Torus. They picked Mr. Simeone knowing he was not a trader at Torus. He wasn't. Knowing that he was actually a back-room administrative person at the firm, who I can't recall if he finished high school, but he didn't go to college. He's not the most sophisticated person. He didn't want to spar with defense counsel who knew more about hedge funds.

Defense counsel also know that they did actually depose traders from Torus, multiple of them, and they gave very eloquent, sophisticated, and informed testimony about this market, about why Torus would benefit from platforms, about why Torus suffers from the lack of transparency. Dr. Zhu in his reply report cited this testimony on pages 117, 118. Defense counsel failed to mention it.

They say Torus is not adequate because it is a proprietary hedge fund. It's a proprietary trading firm, not a hedge fund. This is Goldman Sachs own internal presentation talking about who are end users, who are representative end users. Torus is one of them.

We were sort of surprised to hear that Torus didn't actually have prime broker accounts. It's not true. Torus had two of them. One of them was with Goldman Sachs Execution and Clearing. That's a named defendant in the case. It's a named defendant in the case because it provides execution and clearing services which are prime brokerage services.

If my friends from defense counsel really thought that Torus actually didn't use a prime broker, we would have heard about it before today. Torus then switched to another prime broker at Bank of America. Again, using an entity that is a named defendant in the case. Torus would have been able to trade on the platform in the but-for world. I'll again refer the court to those passages from Dr. Zhu's reply report I mentioned and I'll come back to this.

The other point is -- and this is our case, we might lose it, but it's our case -- that everyone benefits when the platforms come, that everyone benefits when it's no longer the world of the luxury high-end travel agents that you have to try to get on the phone. Maybe you're on hold for an hour. Everyone benefits when the platforms come, including Torus. This is essentially the point here.

Scera. Now, this goes a bit to the conflict point. I want to pick up on Mr. Brockett's point that these are all wolf in sheep's clothing arguments. I'll focus on the Payment Card and Literary Works cases, which counsel I think misrepresented.

I, in fact, represented the lead appellant in the Payment Card case and know it very well. It's the Home Depot. I was at counsel table next to Tom Goldstein when he argued to the Second Circuit and won.

Counsel seemed to suggest that those are settlement cases, of course. But it's all the worst in the litigation context. That's completely the opposite. The Second Circuit made that very clear. The Payment Card case was a settlement only class certification where they proposed two classes. To make it worse, they proposed to give nothing, zero, to one of the classes. To make it worse, no one could opt out of that class.

The Second Circuit very clearly said, we're especially concerned about this and the settlement only context. Because the incentives for that type of tradeoff are heightened. We're also especially concerned with it because of the lack of the opt-out rate. You'll see the cases they cite are the LIBOR and Forex, where you have class members actually clashing with each other on trades. And they are episodic manipulation cases so they have completely divergent interest about who -- whether the trade went up or down. And then they cite the settlement only cases. AmEx you heard them mention, payment Card, Literary Works.

The litigation only context which we have here, courts understand to presume, we are making our decision on the

merits. We are not trying to rig anything. We are not trying to trade off one value of a class so we can get higher settlement fees. We are picking the damages figures we think are the best to present to the jury, and that is why these settlement cases don't inform the court's decision here.

By the way, for my other friend from the defense counsel, I'll note in the Payment Card case, where discovery also closed and the trial has not been set. Summary judgment is fully briefed. All of the parties are actively discussing, updating the discovery for trial, including the damages calculations, because that is what happens in antitrust case. If you have a conspiracy that harmed people in a market, those people aren't just out of luck because fact discovery closed a couple years before trial. It is completely routine to update damages calculations in antitrust cases before trial, and that is going to happen in this case. We made these points.

Now, defendants, it's a very brief argument. They said, look, our class also has broker dealers in it like Citi. I'm just going to spend a moment on this. They could try to pick off Citi if they want. They can try to pick off people. The reality is, they forgot to mention Citi invested in AQS because these luxury high-end prime brokers that we're talking about here, they had wrapped up most of the supply of the market. People had to come to them, including Citi. Some of Citi's clients sometimes wanted to borrow Tesla. Citi didn't

have it. They had to go to the prime brokers and pay the inflated spreads to the prime broker defendants because they had wrapped up the market, and that is why even second-tier dealers like Citi paid inflated spreads. They are in our class, and they supported platforms too.

The individualized defenses point, they rely on Asacol. It is completely different. In Asacol, it was a brand drug case, brand generic. The plaintiffs' very theory conceded that determining impact, determined on figuring out on who would switch from brand to generic. You had to know the splits from brand to generic. Footnote three makes clear, they didn't claim the brand price would go down too. The problem is they had no method for identifying who would switch, yet knew thousands wouldn't.

So the plaintiffs' impact theory required individualized inquiries. It doesn't apply here. This whole defense doesn't apply when the plaintiffs have a common methodology for proving classwide impact. They also had no win-to-win methodology. This case is very different.

We have a viable methodology for proving classwide impact. We have a way to prove everyone benefits when the platforms come. We don't have to determine. We will prove that the option to trade on a platform benefits all class members. We are capable of proving classwide impact. But defendants are still going to have a fair opportunity at trial

if the class is certified.

First, as the Olean decision explains and your Honor alluded to this, they can try to defeat our case and they can try to prove our classwide proof doesn't work. They can try to prove to the jury that Dr. Zhu was a hack who came up with a model that doesn't mean anything. Maybe they win. That will raise a common dispute. It supports class certification.

Second, they could try to pick off class members through individualized rebuttal. Nothing will stop them from doing that. They say today they have some master undisclosed plan for doing that with thousands of people. That's just not credible. Who are these people? They haven't identified them. They weren't in their initial disclosures.

Who are they planning to call at trial? They barely took the depositions of any class members. They don't know what these people will say. They never established they have any reliable evidence to present showing that any particular class member was not injured. They mainly talk about Torus, because Torus is a class representative, and that is the idea, but this is all just very vague.

Reality is, though, just to finish this, defendants will never have to put up 1,000 inquiries. If defendants actually at trial could start to show here's 20 people, here is 30 people who somehow wouldn't have benefited from platforms entering the market. But on that threshold, they are going to

disprove our case.

(Continued on next page)

MR. OLSON: They're going to disprove our case and win, and we'll all go home and they'll have won. There will never be a circumstance they have to put a thousand people on the stand, and there's all ways to handle this exact same argument. Defendants cite no case in which the plaintiffs had a viable method for proving class-wide impact but class certification was denied because of this threat to prevent to call thousands of people at trial.

By the way, *Asacol*, their lead case, was rejected by Judge Gershon in *Restasis*.

Aluminum Warehousing, I'll just point this out. They rely on it. This line, I think, says it all: This case is decidedly is idiosyncratic. There, the plaintiffs had no model that held up at all. Their expert had just made very, very basic errors. This is a point I've already made.

Thank you, your Honor.

Their expert, by the way, we asked:

Now, have you actually done any empirical work that identifies people who would somehow be worse off without the conspiracy?

His answer:

No. No, I didn't. You know, I'd have to do these inquiries. I'd have to think about it.

But he didn't even have an example. Courts reject

these types of speculative contentions. *Olean* also rejects this idea that individual damages estimates somehow disprove impact. We've covered this; I'll go very quickly. There, too, defendants tried to say the same thing, by the way. They tried to say, Oh, look, we've run the model that shows some people didn't have positive overcharge charges, that blows up your impact theory. *Olean* rejected that. It said those people -- it was mainly because of a lack of the data, as it is here; those people can rely on other evidence, such as about the structure of the market for impact.

This, I think, is a key point. It's not the case that the only way to prove impact in cases like this is through regression model of individual damages. Dr. Zhu's model is very similar to many other court-approved models. That includes the market structure analysis accepted in *Air Cargo*. It includes the market structure and pricing pattern analyses in *Blood Reagents* from the Third Circuit; the price variation model in *Dial Corp.*

This one is the most, probably the most on point, the *High-Tech Employees* case. I'll pause on it for one moment. It's very similar. In fact, economic search theory was born in labor markets, and this was about high-tech companies agreeing not to poach each other's employee, and the defendant said, You know what -- they agreed not to solicit, call people on the phone and offer them jobs. Defendants said, You know what?

Only the people who would have gotten that phone call were harmed. And the plaintiff's expert said: No, it wasn't just the people who'd gotten the phone call, but that agreement suppressed information across the market, made it hard for employees to search for jobs, and because of very similar, a very similar model about search theory showed that all class members were harmed, not just the one who had gotten the phone call. It's very similar to our case and, again, the yardstick model in *Restasis*.

THE COURT: What does it do to the class if instead of it being 100 U.S. doc loan transactions, as you define it, being the daily position, that it was just 100 U.S. doc loans using sort of the defendants' concept of a loan that might last 100 days or 50 days or something else?

MR. OLSON: I'm not sure it would have a tremendous difference. It would eliminate some of the more very fringe players. But for example, Torus had more than 100 trades.

THE COURT: Okay.

MR. OLSON: And so that wouldn't be an issue.

THE COURT: And is the transactions definition that you use in footnote 10 of your opening brief being the daily position --

MR. OLSON: Yes.

THE COURT: -- what drives that? Where does that come from? Is that expert-driven? Is that market-driven? Does

that come from another case? What's sort of the source of that?

MR. OLSON: We consulted with our experts. Again, the goal there was to really eliminate completely special-purpose traders who popped in the market for an isolated trade and popped out and never returned.

THE COURT: Okay.

MR. OLSON: So it was meant to be a very low threshold.

THE COURT: Okay.

MR. OLSON: Because, again, it's like the luxury high-end travel agent issue. Our belief, very strongly, is we can prove when platforms come to the market, even people who are relatively small are going to get better prices too.

Defendants have said today that Dr. Zhu didn't actually use actual world data. I went over that with your Honor this morning, and they did. Dr. Zhu's model, the inputs are there on the left-hand column of the chart I went into. That comes straight out of the quantitative data in this case. It's the spread, it's the L2 price and the L1 price for cold, warm and hard-to-borrow stocks. That is actual data that was crunched at some elaborate length and fed right into the model.

Now, defendants' point here is that Dr. Zhu didn't actually predict all of the price dispersion that happens in the real world. That point is just off base. He wasn't trying

to do that. His model is not -- we know the price dispersion that occurred in the real world. He was trying to ask a different question, which is what would happen to prices when one thing changed, when some search costs go down?

By the way, the suggestion that this is some rigged effect of the model and the only thing that turns prices, search costs so that they go down, of course, prices are lower, is completely untrue. The model has very sophisticated economics to arrive at its conclusions about prices.

What Dr. Zhu was doing was holding, stripping out the observable factors to isolate the cause and effect relationship at issue that is the lower search costs. So counsel put up this slide that they said was their favorite and has all this price dispersion. I can't recall which one it is right now.

THE COURT: I remember.

MR. OLSON: Okay.

The thing is we all know that a lot of that price dispersion is driven by observable factors. It's driven -- for example, the larger hedge funds typically get a little bit better prices than the smaller hedge funds. So we know that. The question is, within each category, what effect does the unobservable feature, which is whether that person is using a platform, have on price? That is what his model has tested very effectively. He explained this giving an analogy, which he's good at.

Let's say we were wondering about mortgage rates, and the question is do people who go and get multiple quotes from different banks for mortgages do better than people who don't? You wouldn't be able to answer that question if you just lumped all of the data together because there are observable factors that will put that data into different buckets. For example, people with better credit scores are going to get better mortgage rates. So what you do is you control for the observable factors. So you take brackets of people who have good credit scores. And then you test within that to determine what was the effect of the unobservable thing -- them going out and getting multiple quotes -- within that category.

That's effectively what Dr. Zhu has done here. Within every way you could categorize the class he has shown that the unobservable factor leads to lower prices.

Sorry. I'm not going to have him say this.

THE COURT: You're almost at the end.

MR. OLSON: Thank you.

This issue about does the search model apply to lenders, of course it does. His original work made very clear that the search cost issue applies on both sides of the asset -- to the buyers and the sellers. And it's not hard to do that. Their experts know how to flip the model. He explained that.

The issue here, they say, you know, it's actually

prime brokers who have to do searches because sometimes they have to call the lenders. That's missing what the search costs are. Lenders have stock they want to make money from. Lenders -- let's say a pension fund, they have Tesla; it's worth something. They want to lend it out for money. In the world, the OTC world we live in, they have to go through a lot of effort to see who's going to buy it and for what price. The search costs are the cost of getting price quotes. And it don't matter if the lender called Goldman Sachs, picked up the phone and called or if Goldman Sachs picked up the phone to call. What matters is that it is complicated. It takes work to get those price quotes.

The SEC has fully adopted this, so since I'm almost out of time, I will just make one point about the SEC, which is the SEC went at great length about all the benefits that beneficial owners will gain from a reduction in search costs. And there was one place where the SEC, as part of completeness, said, you know, but there could be some costs too; we're going to consider both sides of the coin. What's notable here is defendants quoted all of this but cut off in slide 42 the last sentence. And the reason why that's notable is because they misled the court by suggesting that it stopped with this question there might be winner and losers when they cut off the conclusion that says, in general, the commission believes that reductions in transaction costs ultimately benefit investors.

Yes, we could imagine there might be some plus or minuses. Their ultimate conclusion was ultimate benefit to all investors.

So your Honor, are there any more questions you'd like me to focus on?

THE COURT: No. I think I want to hear from Ms. Levens about the foreign-domestic issues.

MR. OLSON: Thank you, your Honor.

THE COURT: Thank you.

I'll give the defendants an extra five minutes since I'm giving the plaintiffs an extra five minutes. If you could keep it to five minutes

MS. LEVENS: We're going to keep it really short.

THE COURT: My worry is there's some part of the definition that needs to change to make sure that we don't have any foreigners creeping be in there or running afoul of the FTAIA.

MS. LEVENS: No.

Let's start with FTAIA, since that's what the judge would like to talk about. You'll see the section -- okay. This is wrong.

THE COURT: You can give me your slides on costs. I don't think I can process any more about costs today.

MS. LEVENS: I completely understand.

Empagran makes it clear, as do the House reports, that

it is fully acceptable for foreign purchasers to recover under the antitrust laws. It is about the effects on domestic commerce. *Forex* and all of the cases defendants are talking about are cases where there was a global conspiracy that had effects on domestic and global prices. That is not this case.

We have limited the case to just the domestic effects by ensuring that it's limited to only U.S.-listed securities and only U.S. domestic subsidiaries.

Now, let's actually go -- here are the slides. I completely understand, but this kind of makes it clear.

This is defendants' key hypothetical that is their concern under the FTAIA, and it is that prime brokers in Hong Kong could be trading a security or borrowing or lending securities to beneficial owners and users in China. Now, what is clear is that this trade is explicitly not in our class. Our class is limited to trades with domestic prime brokers, and we can tell which trades are with domestic prime brokers because defendants' data lets us know.

It is not about where any individual trader might have pushed a button. It is about the corporate entity that that trader was working for. We have made sure that it is only the Morgan Stanley subsidiary that is included in this class, so that we make sure that it is only domestic trades.

Now, if you want to see one more thing, in the *Vitamin C* litigation, it made it clear that payment for a product in

the United States is sufficient to create a domestic effect for FTAIA and antitrust standing purposes. And the *Vitamin C* litigation case that's cited there also lists several other provisions that have had the exact same conclusion.

Does your Honor have any questions about that?

THE COURT: No. I understand what you're saying.

MS. LEVENS: Of course.

THE COURT: Okay.

MS. LEVENS: I don't really think there are any questions about cost either, unless --

THE COURT: No.

MS. LEVENS: Thank you, your Honor.

THE COURT: Five minutes from the defendants on any final points.

MR. PASKIN: Thank you, your Honor.

Just a couple of brief points, and Mr. Wick may have as well.

With respect to what Mr. Brockett said, he made one point that I wanted to respond to. He talked about this sort of potential allocation process after trial, etc. It's not just about manageability of that, and it's not just about whether or not counsel is conflicted from engaging in that process. The problem here is it does go to an element of liability. The element of liability is injury in fact. It's not -- the injury element isn't just did the alleged conspiracy

cause harm? The question is did each class member suffer injury in fact? Did they suffer a financial detriment as a result of the conduct? And whether or not they suffered a financial detriment rises or falls, for many class members, as Mr. Wick pointed out, on where you set those numbers.

When you move that W around, it either kicks out or adds in hundreds of borrows or lenders out of the class, and that is a liability element because it determines whether there are zero, or negative, damages for certain alleged class members. And that's an issue that can be sorted out after trial. That has to be sorted out now. It has to be sorted out either on a common basis, which it can't be, or there can't be class certification. So it's not just an issue of conflicts. It's an issue of predominance and what that issue means in terms of the ability on common evidence to identify uninjured class members and who the uninjured class members are.

With respect to Dr. Zhu, Dr. Zhu's academic work may be pristine. It may be the best way to identify market-wide general average benefits. I don't know. But Dr. Zhu's academic work does not say there are no losers and only winners. What Dr. Zhu's study says, and his numbers all do it. He says if you look at these averages, they're average. On average he thinks everybody's better off. He knows there's dispersion, and he attempts -- and Mr. Olson said, Well, the dispersion all doesn't matter because he bucketed people on

observable characteristics. The most important characteristic, though, is do prime brokers have insight into whether or not these clients have price transparency? That, to Dr. Zhu, is an unobservable characteristic because he assumes that there is no price visibility that prime brokers have.

We showed you the evidence, your Honor. From hedge funds, from prime brokers, it's widely known in the business who else your prime broker -- who else your hedge fund clients are dealing with, and the hedge funds use that to their advantage. So the key assumption, the key characteristic that, in the real world, is observable Dr. Zhu assumes is not observable. And that is fatal to his analysis because that's the one variable, as Mr. Olson said, that's the basis on which his analysis determines impact.

And the references to the SEC are really the same thing. Mr. Olson highlighted the last sentence there that said, and he slipped in an extra word. The SEC said, in general, investors benefit. Mr. Olson said, in general, all investors benefits. That's not what the SEC said.

THE COURT: I can read.

MR. PASKIN: But the SEC recognizes winners and loser, and there's nothing that he said can undermine that. That's what the document says.

One other point just about sort of the mechanics of trial and proof. Yes, one thing that we will do is we're going

to march in hedge fund witness. We're going to march in all sorts of witness. We're going to march in people who can talk about all of these issues in a contextual way.

The other thing that we're going to do and that Mr. Wick showed through some of the data is we are going to use the Asquith and Pathak damages model to show, to prove at trial that there are class members, when you take specific class members out of the data rather than aggregating them the way Dr. Zhu does, when you take specific class members out of the data and you plug it into the model, the model spits out a negative number, even without any adjustment. So that means that at trial, we will prove, using their evidence -- not even our own evidence -- using their own evidence that they're putting in for a different purpose, we're going to show at trial that there are class members for whom there is no injury in fact.

And, again, injury in fact is an element of liability. It is a necessary element of liability that they have to prove on a class-wide basis, and because the Asquith and Pathak model undermines their class-wide evidence, that's what we're going to present at trial, and that's what they cannot overcome and why the class cannot be certified.

Thank you your Honor.

THE COURT: Thank you.

All right. Let's talk a couple of logistics

MR. WICK: Your Honor, may I have two minutes?

THE COURT: Okay.

MR. WICK: Thank you for your patience, and I'll keep this very brief.

Mr. Olson said this case isn't like in *Asacol*, because in *Asacol* you didn't know who would have switched from using the brand name drug to using the generic drug and if they wouldn't have switched to using the generic drug, then they weren't harmed.

This case is just like that, your Honor. We don't know which class members would have switched to using the platform and which wouldn't. The only way to determine which class members would have switched to using the product and therefore potentially could have been harmed, the only way to determine that is through class-member-by-class-member examination of whether they would or would not have switched and whether they would or would not been able to make a credible threat that they would switch.

Now, Mr. Olson says, Well, it doesn't matter if the defendants could show on an individualized user-by-user basis that they wouldn't have used the platform and wouldn't have switched because we can just rely on the Zhu model and the Zhu model might be persuasive to a jury. The trouble with that, your Honor, is that a jury might well be persuaded by our class-member-by-class-member evidence that in some cases the

Zhu model is wrong. The jury is not required to decide all or nothing, the Zhu model is always right and the defendants' individualized evidence is always wrong. In individual cases, we may be able to show that the premise of the Zhu model is inapplicable and through class-member-by-class-member evidence they wouldn't have switched to the platform and therefore were not harmed.

With respect to the FTAIA, Ms. Levens said that all that matters is that the class member traded with a U.S.-domiciled entity even if the trade operationally took place in Hong Kong. Judge Schofield says she's dead wrong about that. What Judge Schofield said is the defendant's domicile doesn't matter; what matters is where they are operating at the time of the transaction. If the trade was done out of a Hong Kong desk and booked to the U.S.-domiciled entity, the FTAIA says you cannot apply U.S. antitrust law to that transaction, and the only way to figure out that is to go through millions of transactions one at a time and figure out where the parties were operating at the time of a specific transaction.

Finally, with respect to the adequacy issue, Mr. Brockett suggested that we are a wolf in sheep's clothing; we just want the class members to fight with each other. If he is right that the class members would not adopt the same common compromise position that he has, that's a concession that he's

an adequate counsel. If he's conceding that independently represented borrowers and independently represented lenders would take different positions than these guys have taken, trying to play referee between the two subclasses, that's an admission he's not an adequate class representative. Independent counsel can make a judgment as to whether they want to be in conflict with the other subclass at trial or whether they want to be in harmony with the other subclass at trial. But you need independent counsel to make that decision. You can't have unitary counsel make it.

Our reasons for raising this issue are because if a subsequent court determines that somebody was inadequately represented, because they didn't have their own, independent counsel for their own subclass, the judgment can be collaterally attacked. So at the end of trial, if there are class members who don't like what they were allocated, then they're free to collaterally attack the class action judgment. If the defendants want to get this right so that whatever judgment is entered in this case has collateral estoppel effect, so that it's not collaterally attacked later.

He says a neutral mediator could fix this problem at an allocation phase. In the first place, you cannot partition the trial between the injury phase and the damages phase, because, as Mr. Paskin explained, we're going to rely on the same evidence on both issues. The same evidence is relevant to

both issues, and it will already be too late by the time of this hypothetical allocation phase because by the time they put on their damages model to try to prove aggregate proof, we will have turned it around and showed that for many individual class members it disproves any injury at all. And that's how their model works.

Their model doesn't just say I estimate from a top-down level collective damages are a thousand bucks. The way their model works is it operates class member by class member. What he says are the total adequate class recovery is nothing but the sum of a number of individual estimates for individual class members. So by the time of an allocation phase, it will be too late. We will already have pointed out that there but-for prices model contradicts the Zhu search cost model and disproves the claim of injury for many class members.

Finally, your Honor, with respect to the *National Football League* case, I guess I should also say that in several of the cases that we cite, there were neutrals there. There were mediators who blessed the allocation between the parties, but in *Literary Works*, the Second Circuit still said that didn't cure the conflict. The only thing that could cure it was independent counsel for each subclass.

Finally, in the *NFL* case that he mentions, where subclass counsel was drawn from preexisting counsel, the court there is careful to note that that only worked because separate

counsel for each subclass was appointed early in the process, before any allocation had been proposed. Here, they have already committed themselves to an allocation proposal. And if they try to, if they try to turn around and at some allocation phase contradict the showing they made at trial, they'll be in a weak position to do that. They're not in an adequate position to do that.

Thank you, your Honor.

THE COURT: Thank you.

Okay. In terms of logistics, I will need a transcript of today's argument. I think largely in terms of confidential information we didn't really have anything come out, but if you think you'll need to redact anything, we can do it under seal in the first instance and then do a redacted copy.

Do the parties have a view?

MR. PASKIN: I think we can take a look at that, your Honor.

THE COURT: Okay.

MR. PASKIN: But I also agree you're probably right that I don't think there's much that's problematic.

THE COURT: I think I quoted some things that might be in yellow. It's up to you to order the transcript. If you want to have be provisionally under seal until you've had a chance to look at it and then let me know if there's any redactions and then we can do a public version. Okay?

I would like to get a copy of the plaintiff's rebuttal slides.

MR. PASKIN: As would we, your Honor.

THE COURT: I'm sure you would.

MR. OLSON: We'll get that to you as soon as we can.

THE COURT: Tomorrow is fine, please.

And I think that's it. I really don't want any more briefing. Obviously, I can't preclude you from it. If there's a case that comes out that you want me to know about, but what I would tell you is just cite the case and tell me which section of your brief or which argument, because all you're doing is inviting a three-page letter from the other side, which is just going to slow my process down, and I know you'd like me to be done sooner rather than later.

As I noted, I will be issuing a report and recommendation. You'll have a full opportunity to object to Judge Failla in due course.

Anything else that anybody wants to cover today then?

Okay. Good. Thank you for the very helpful presentations.

We'll be adjourned.

(Adjourned)